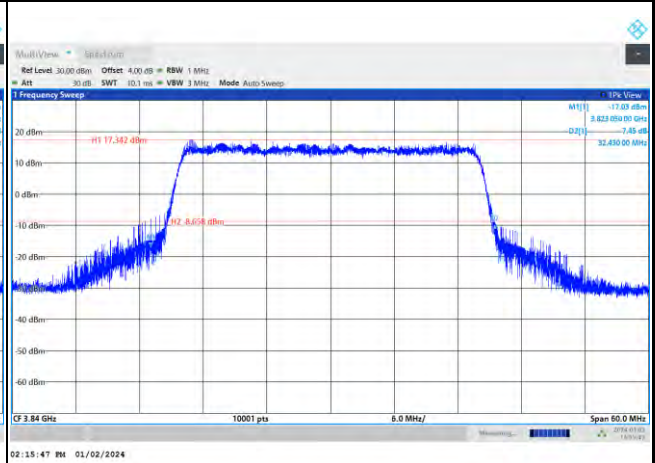
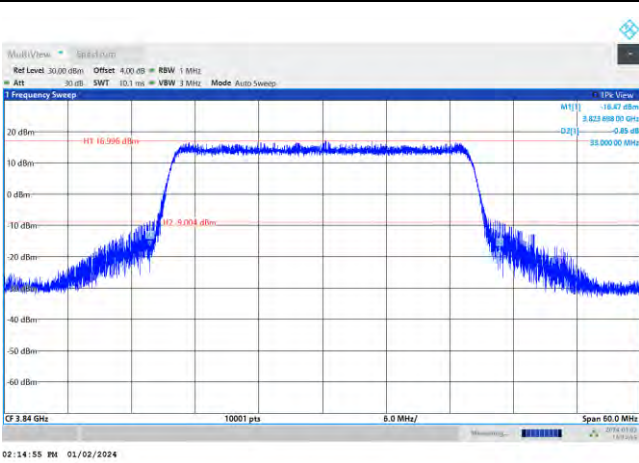




FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

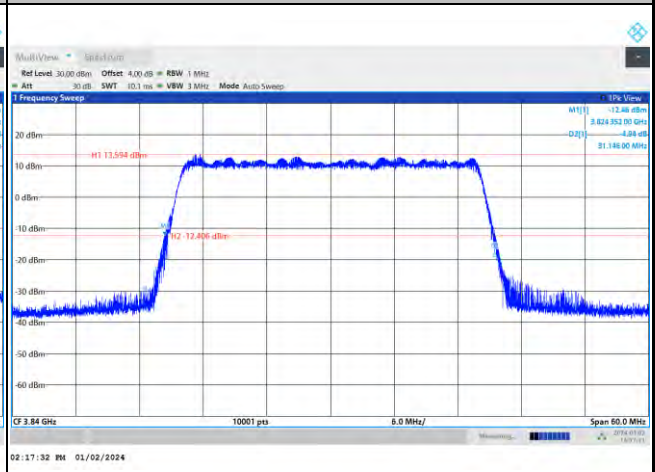
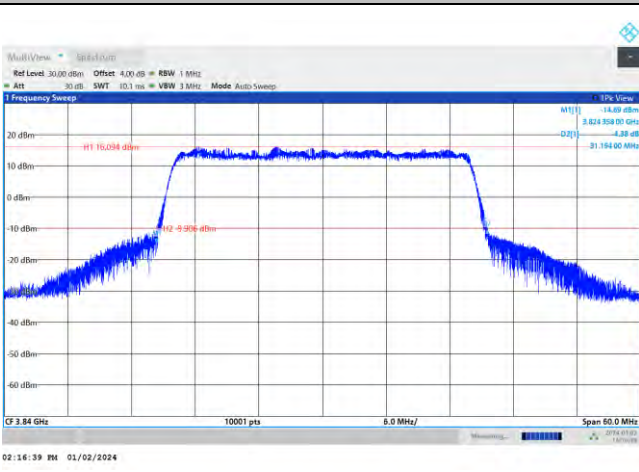
QPSK

16QAM



64QAM

256QAM

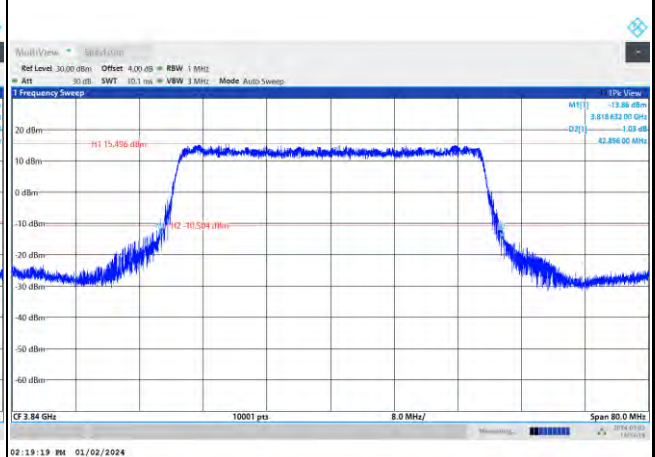
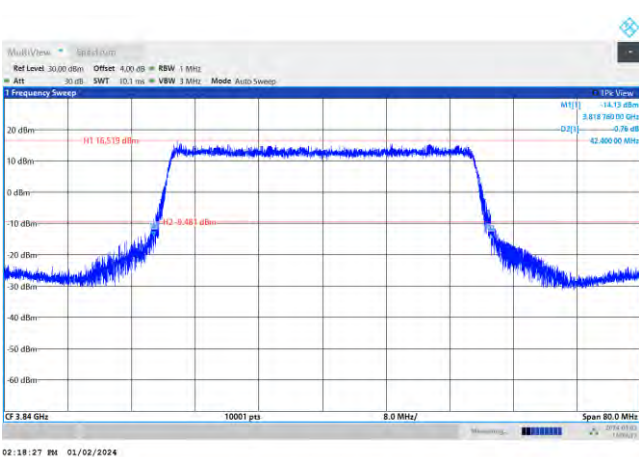




FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

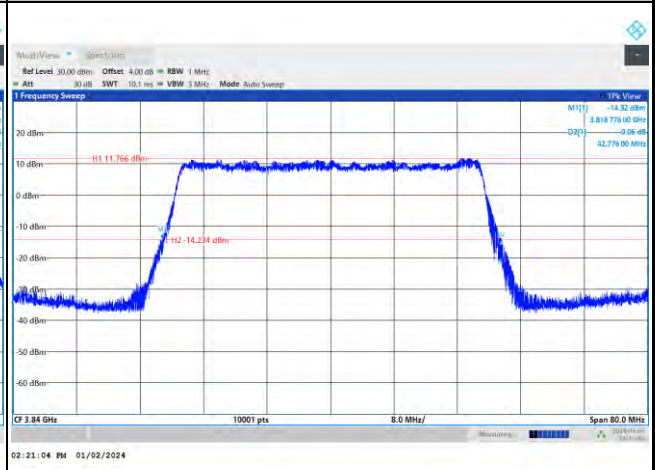
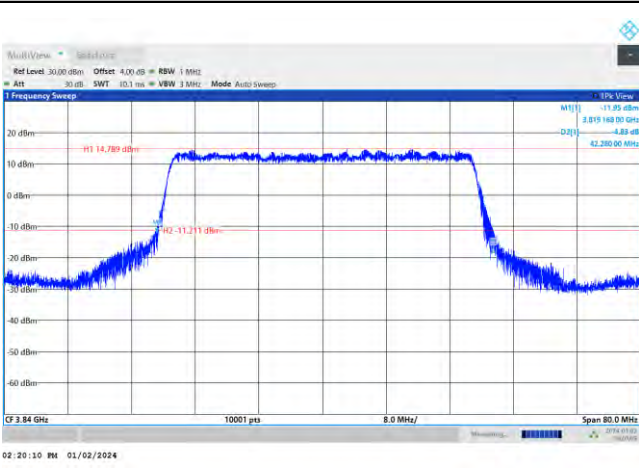
QPSK

16QAM



64QAM

256QAM

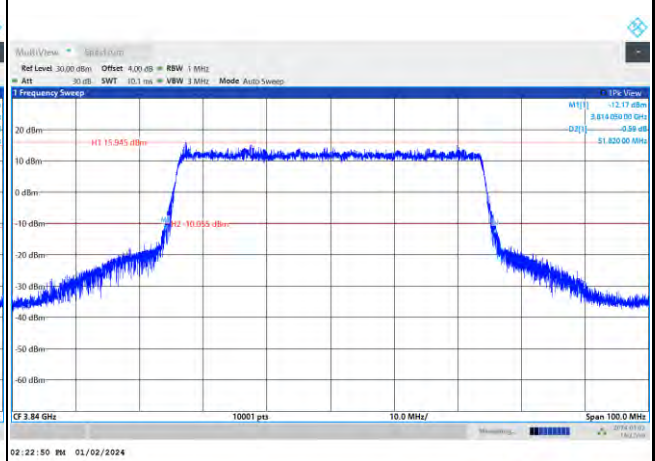
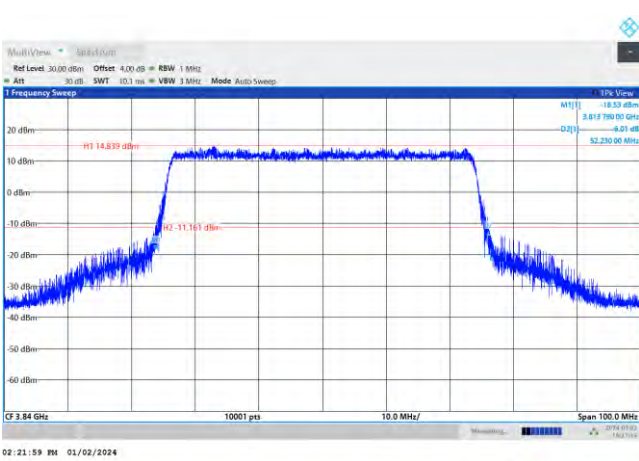




FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

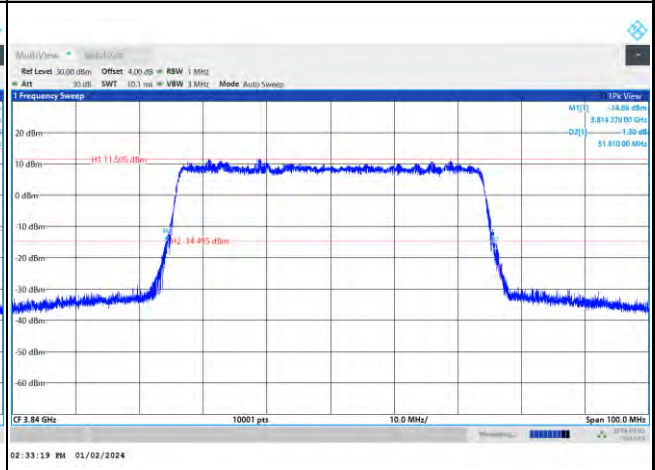
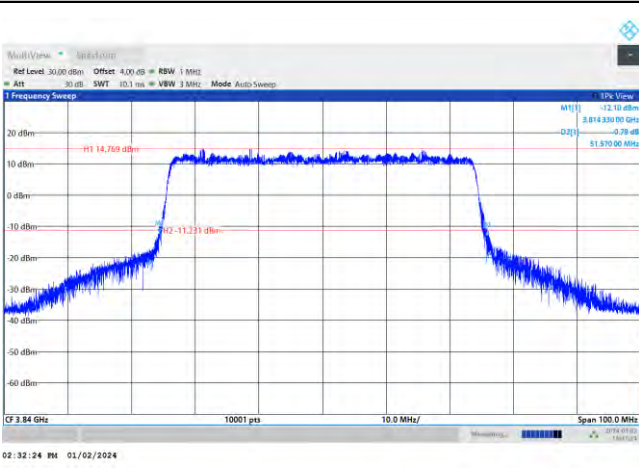
QPSK

16QAM



64QAM

256QAM

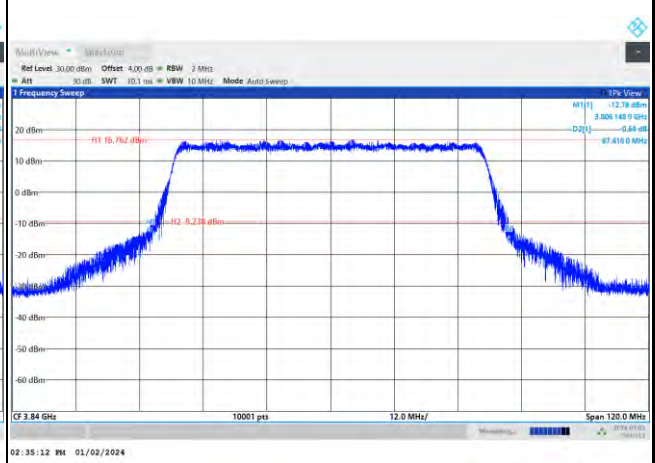
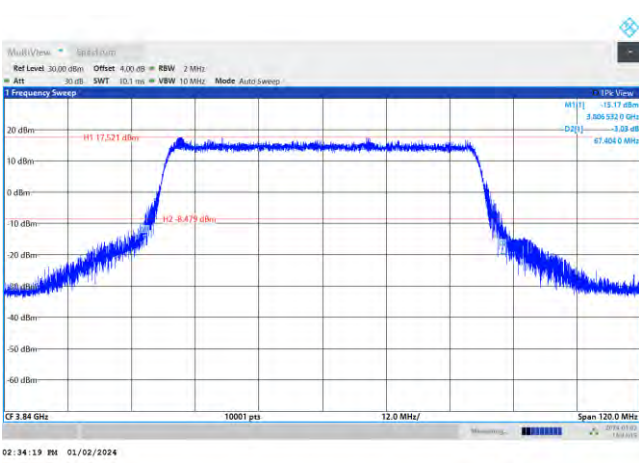




FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

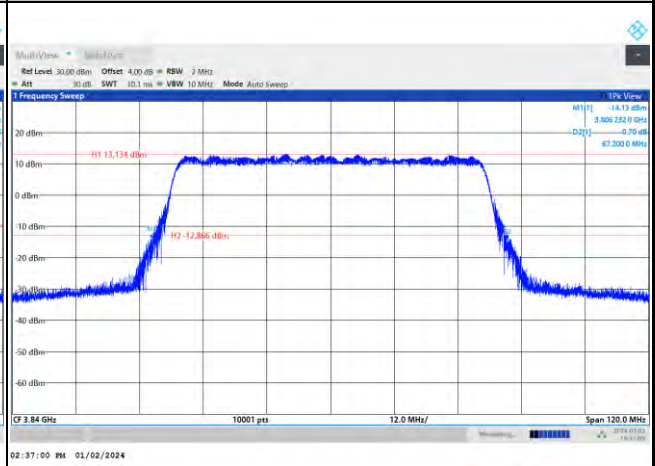
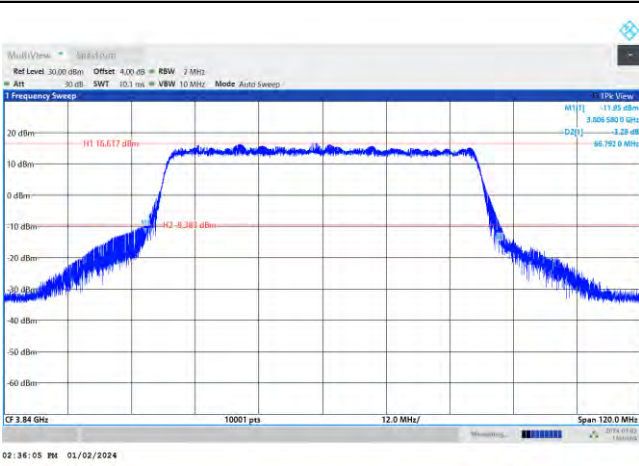
QPSK

16QAM



64QAM

256QAM

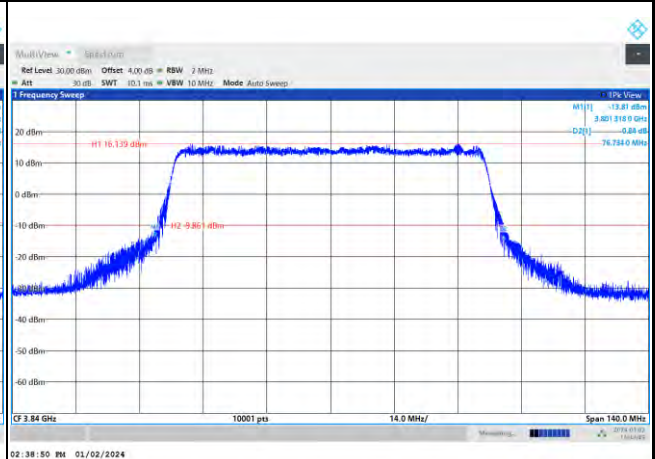
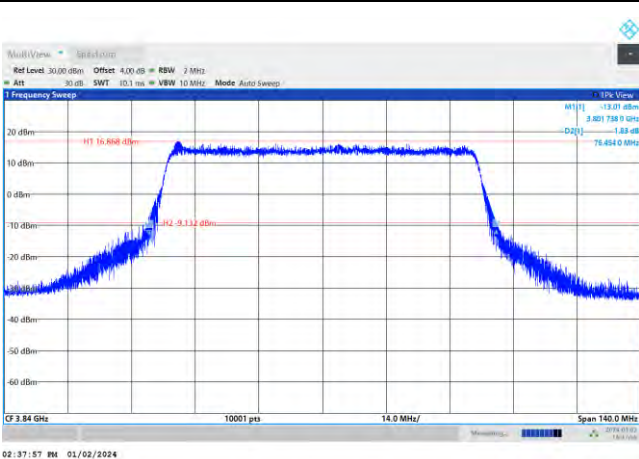




FR1 n77 / 70MHz / CP OFDM / Middle Channel / Full RB

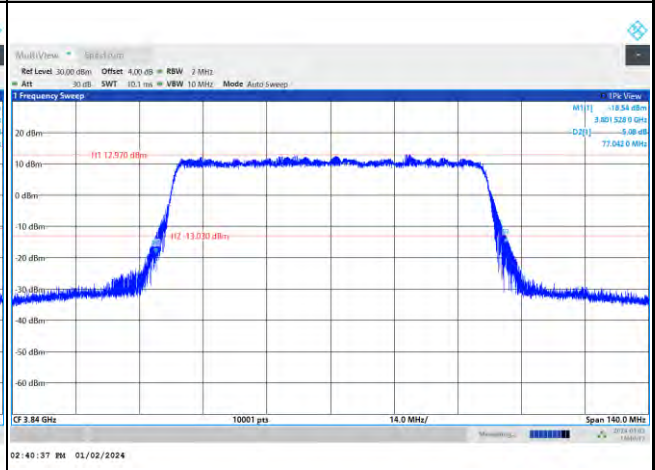
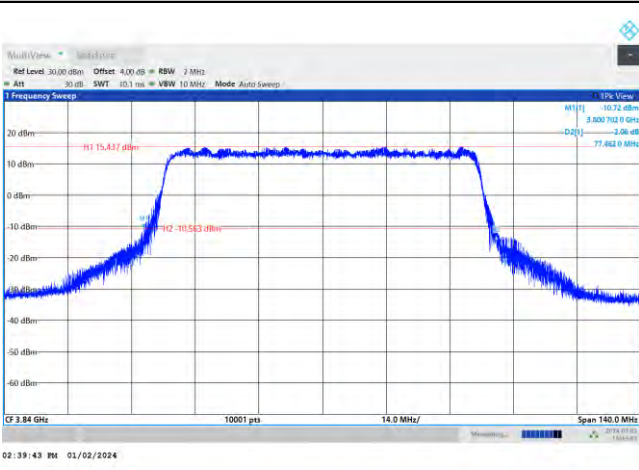
QPSK

16QAM



64QAM

256QAM

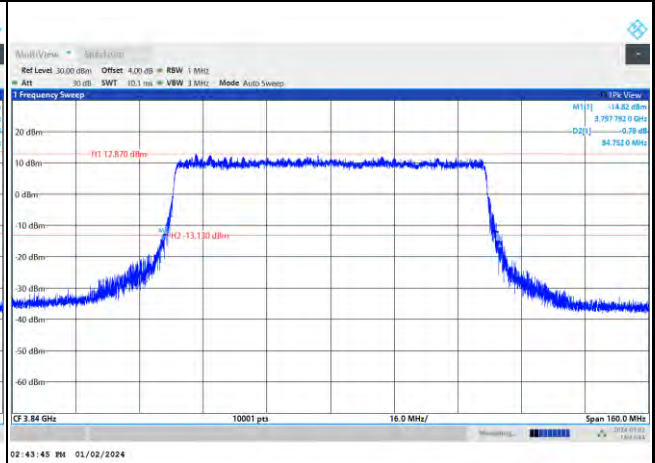
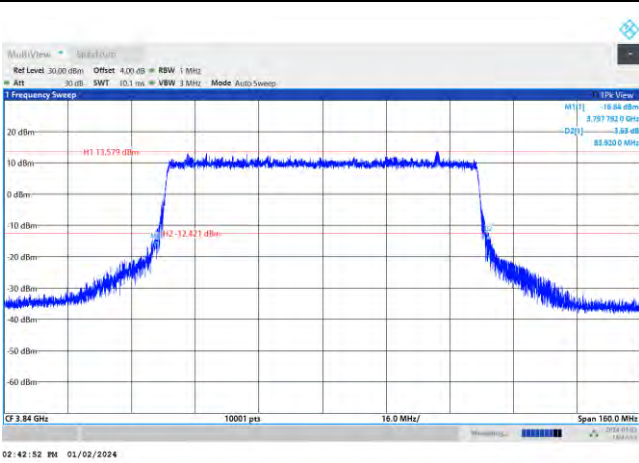




FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

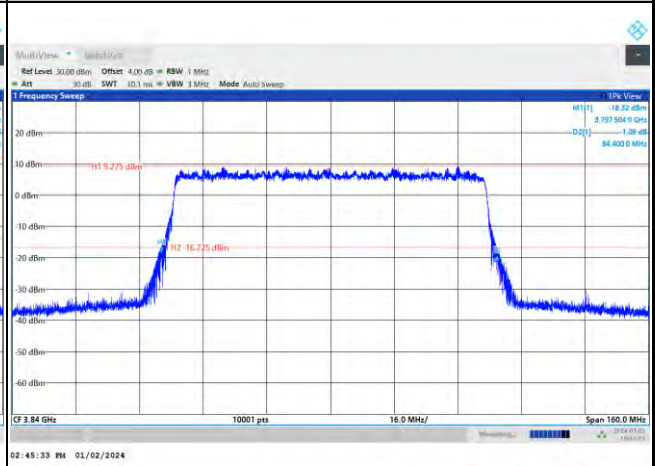
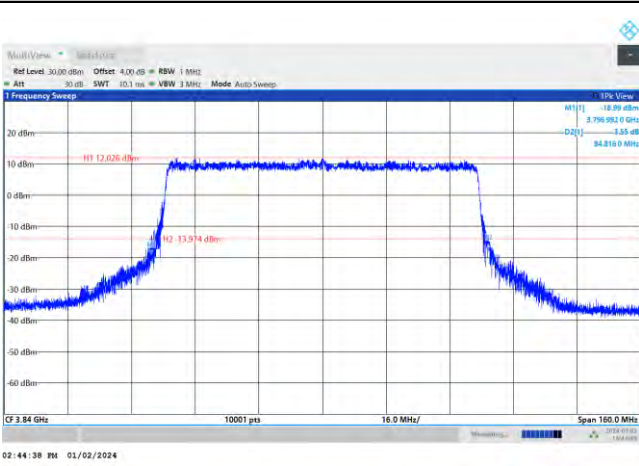
QPSK

16QAM



64QAM

256QAM

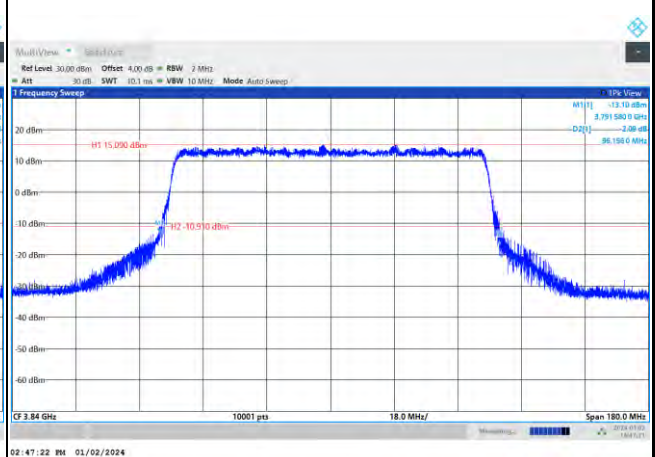
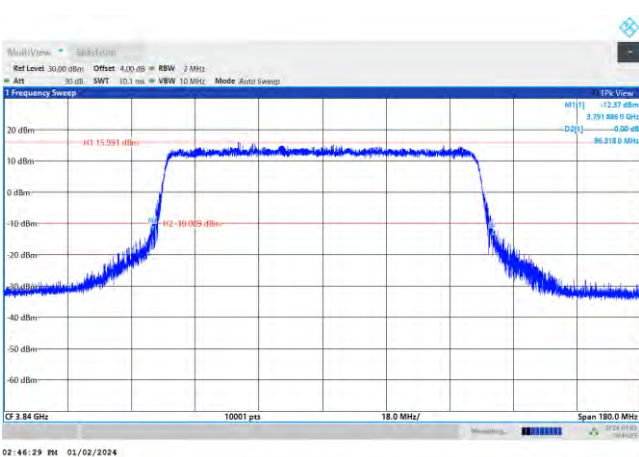




FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB

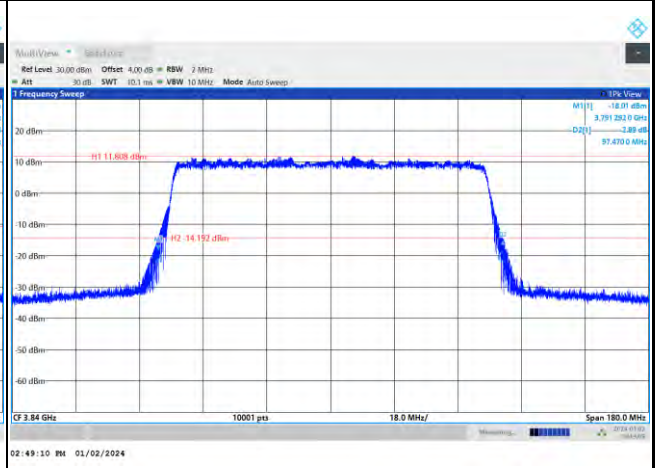
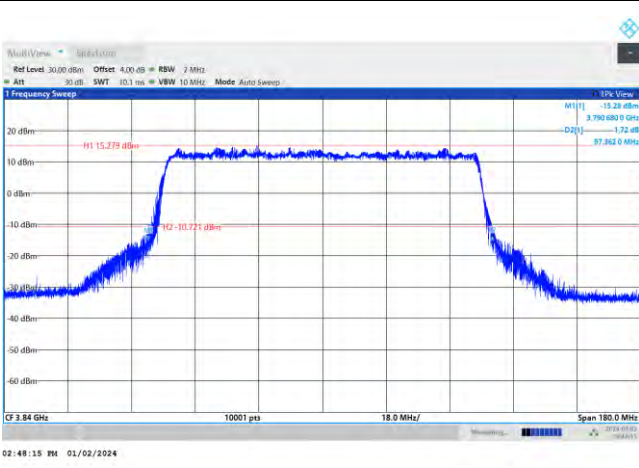
QPSK

16QAM



64QAM

256QAM

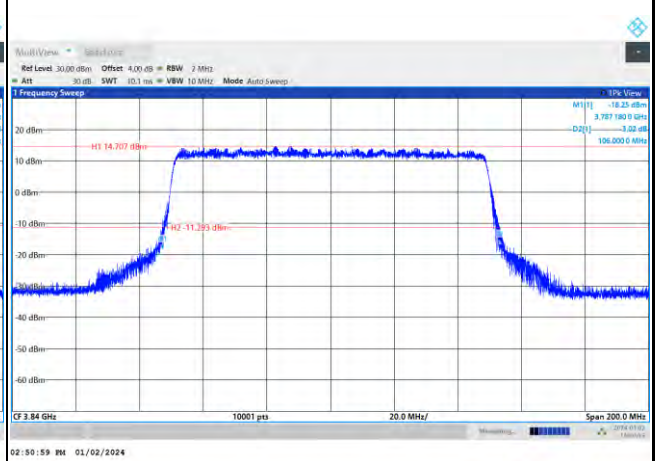
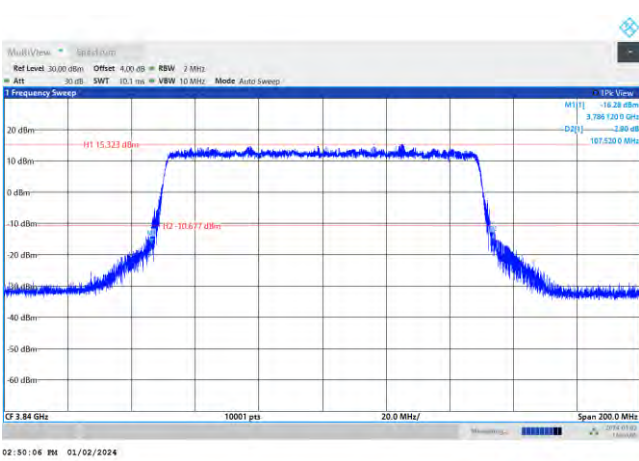




FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

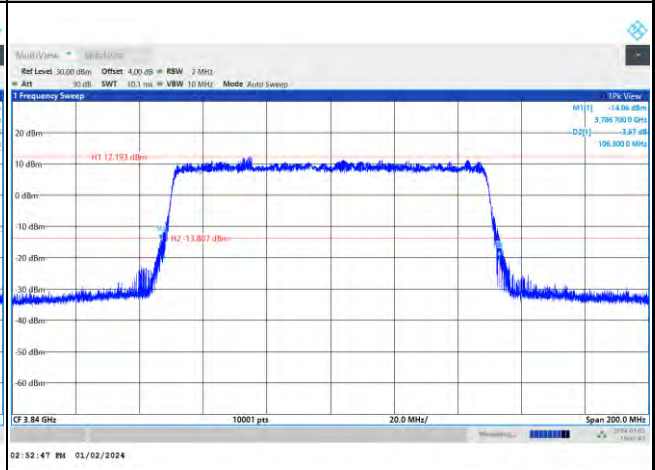
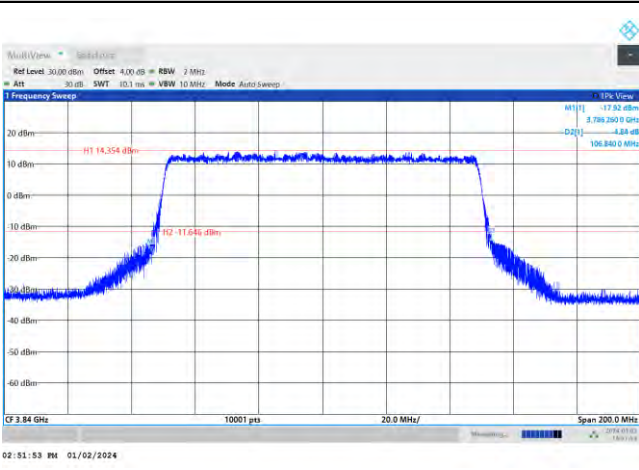
QPSK

16QAM



64QAM

256QAM





Occupied Bandwidth

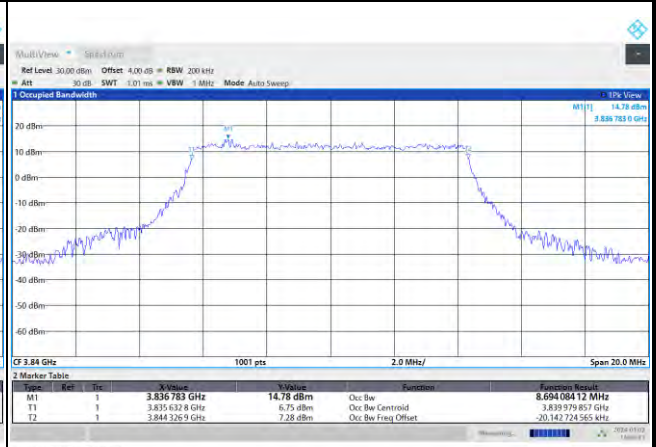
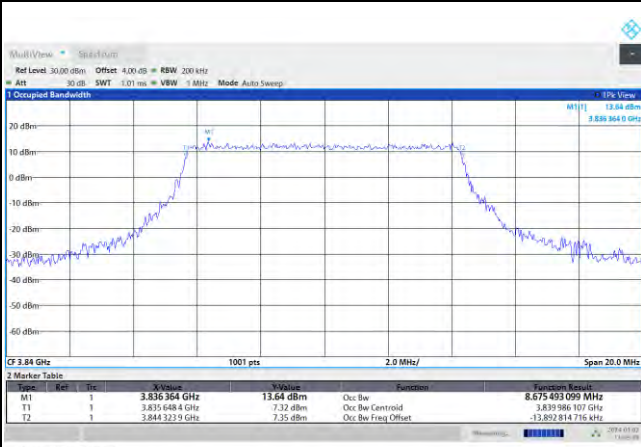
Mode	FR1 n77 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.67	8.69	13.66	13.74	18.37	18.42	23.37	23.36
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	8.70	8.63	13.71	13.61	18.33	18.38	23.37	23.49
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	28.19	28.21	38.24	38.19	47.68	47.64	58.57	58.53
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	28.19	28.19	38.19	38.22	47.67	47.62	58.52	58.47
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	68.08	68.09	78.12	77.90	87.68	87.75	97.77	97.67
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	68.32	68.16	77.94	77.75	88.22	87.96	97.76	97.72



FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

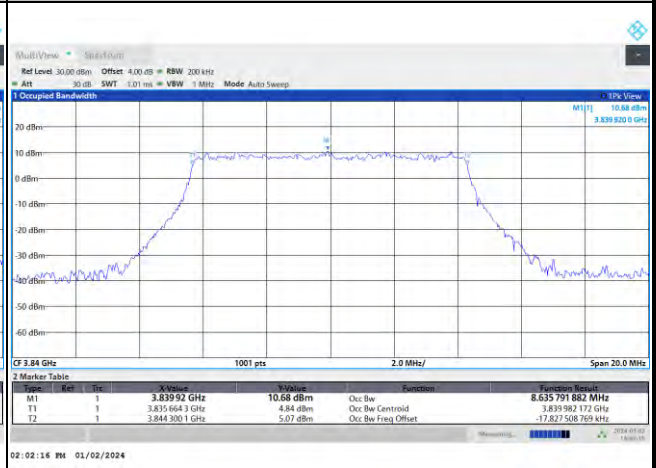
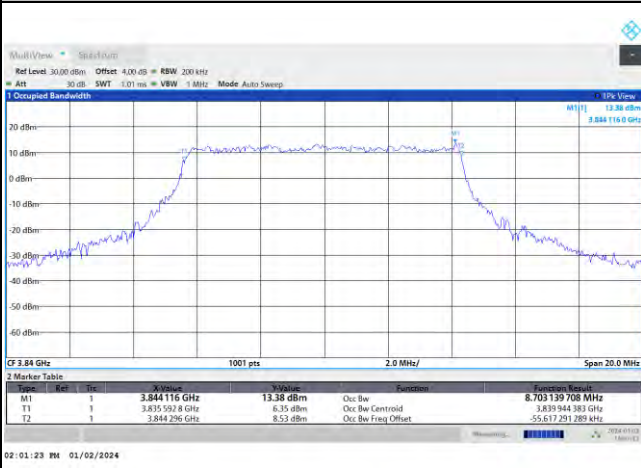
QPSK

16QAM



64QAM

256QAM

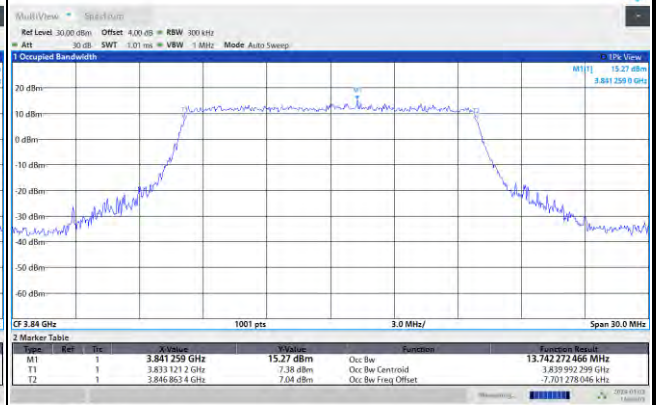
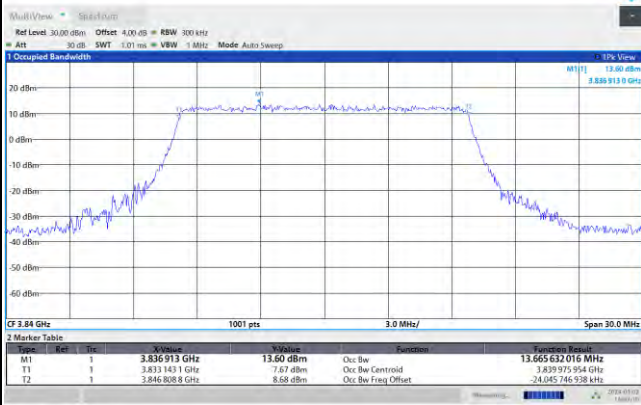




FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK

16QAM

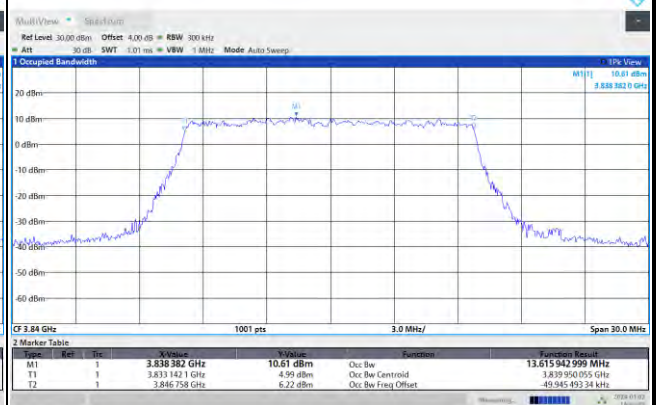
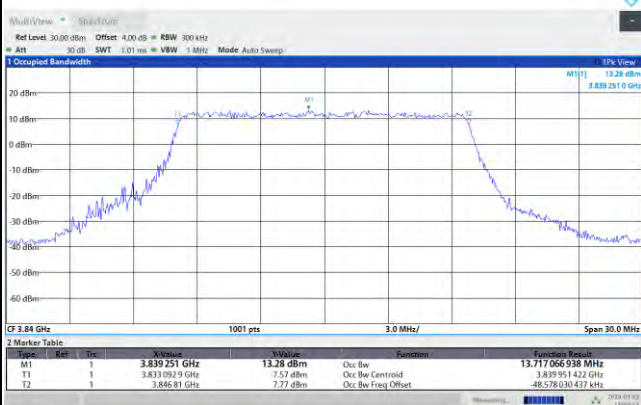


02:03:11 PM 01/02/2024

02:04:02 PM 01/02/2024

64QAM

256QAM



02:04:54 PM 01/02/2024

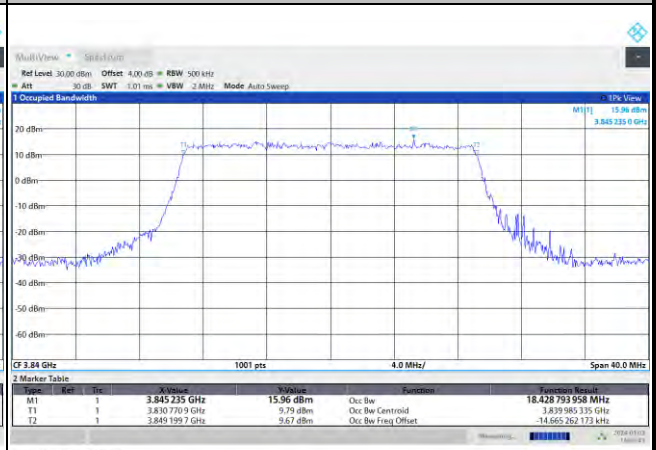
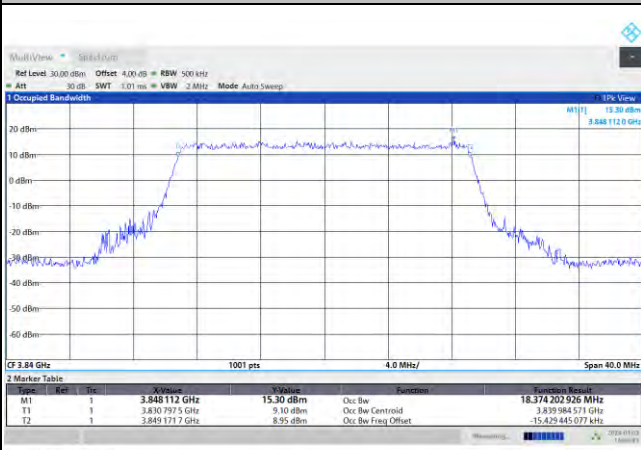
02:05:47 PM 01/02/2024



FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

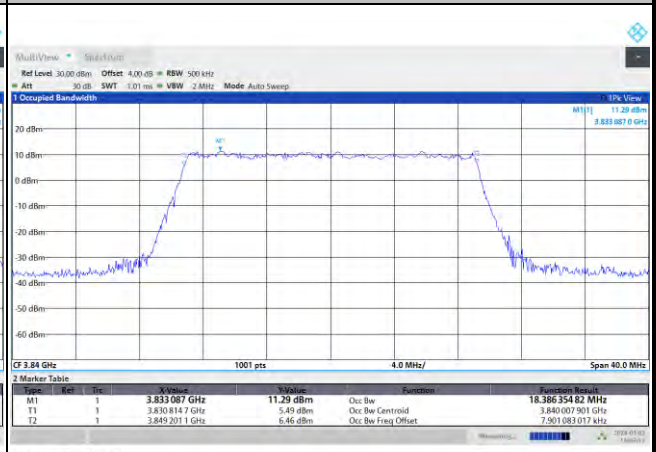
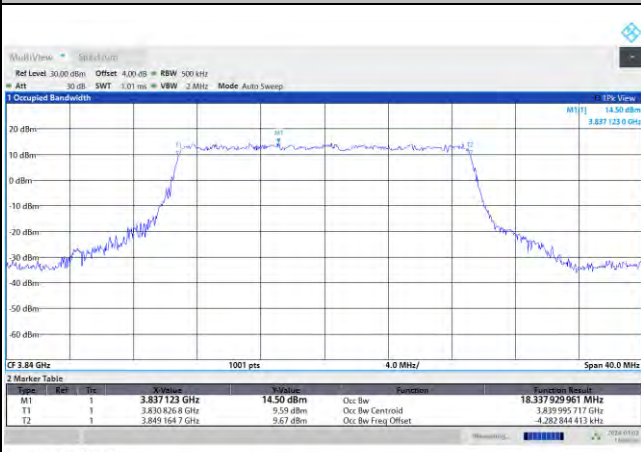
QPSK

16QAM



64QAM

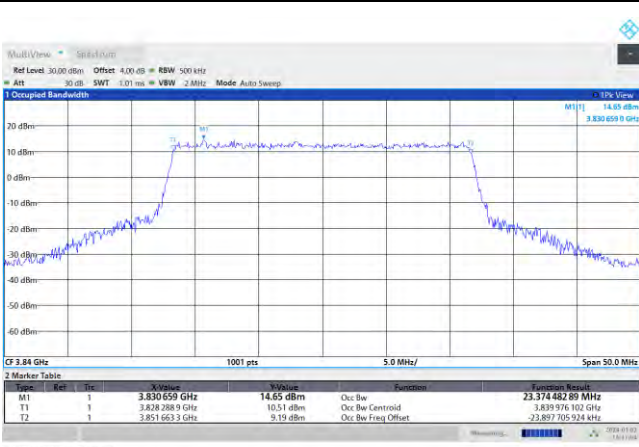
256QAM



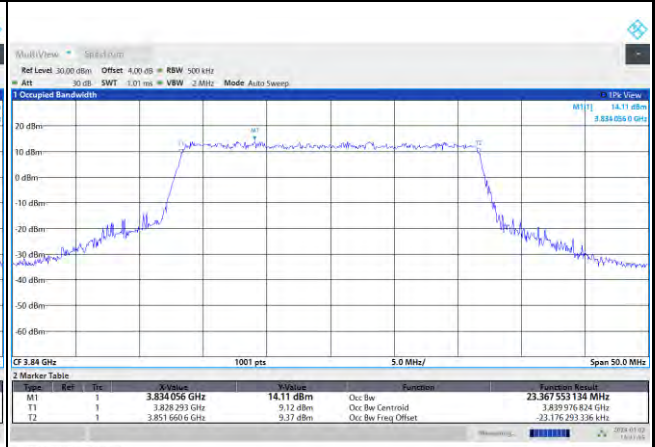


FR1 n77 / 25MHz / CP OFDM / Middle Channel / Full RB

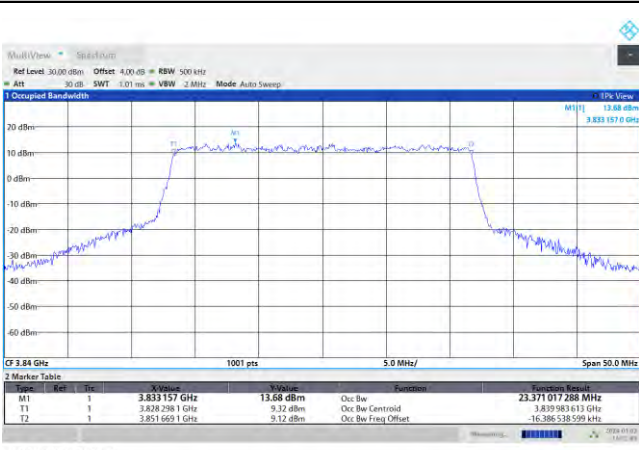
QPSK



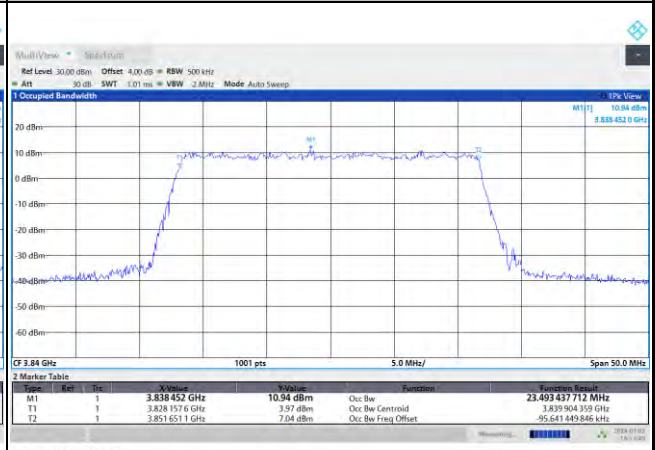
16QAM



64QAM



256QAM





FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

QPSK

16QAM

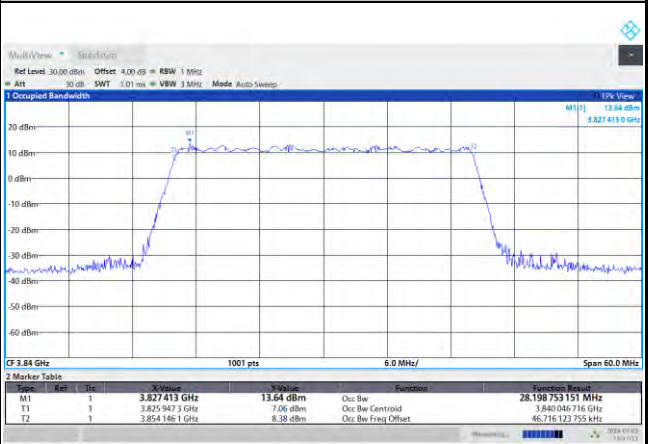
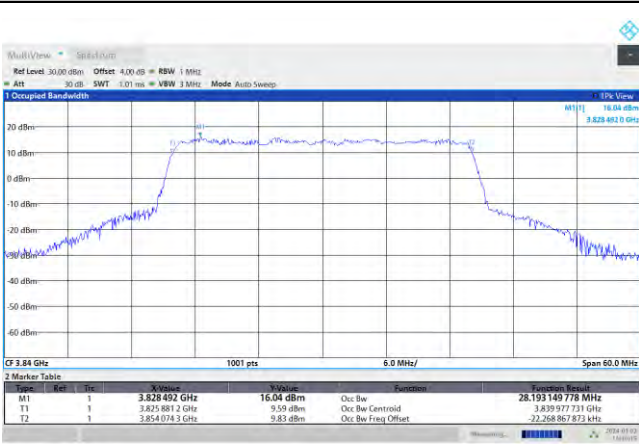


02:14:36 PM 01/02/2024

02:15:28 PM 01/02/2024

64QAM

256QAM



02:16:20 PM 01/02/2024

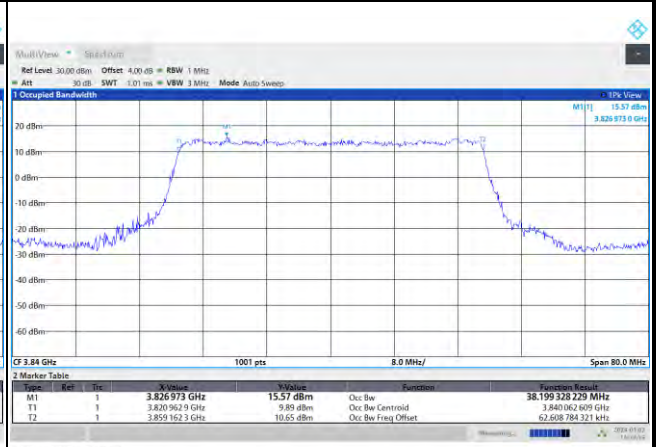
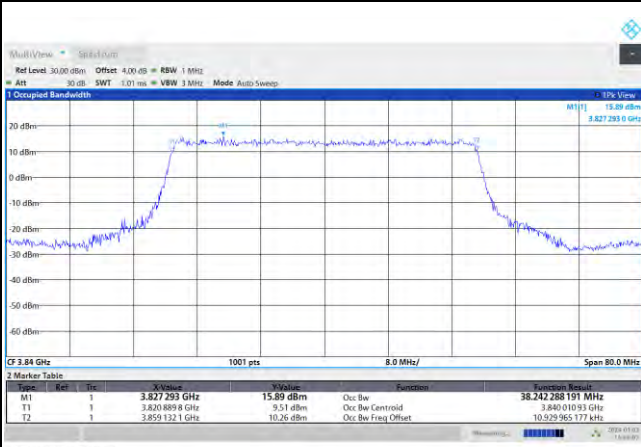
02:17:13 PM 01/02/2024



FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

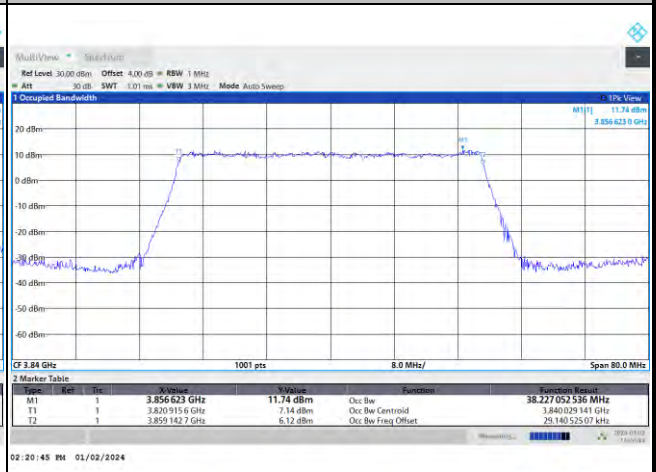
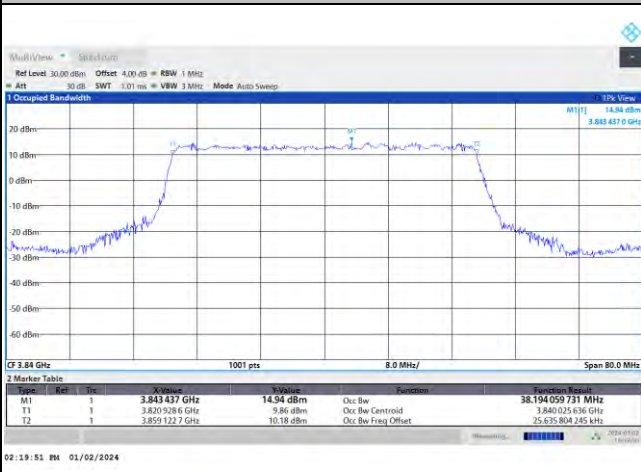
QPSK

16QAM



64QAM

256QAM

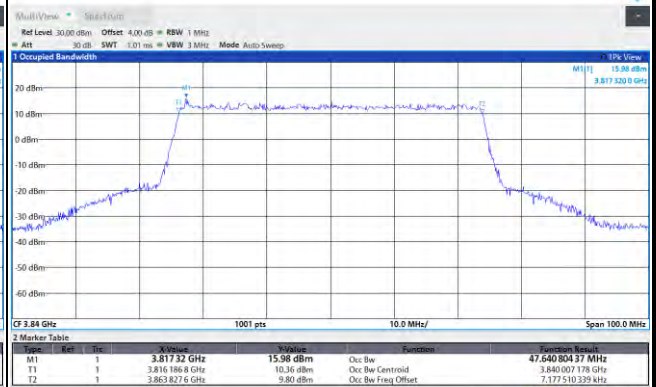




FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

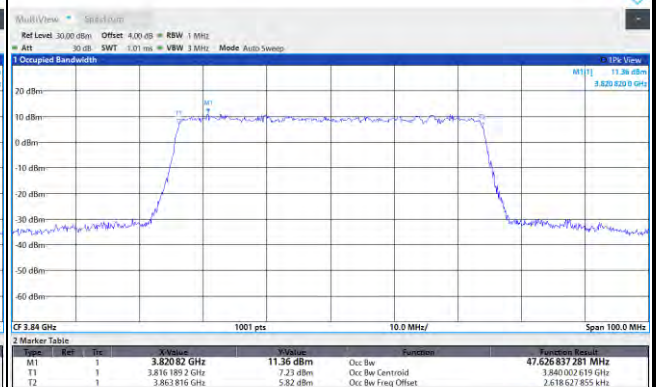
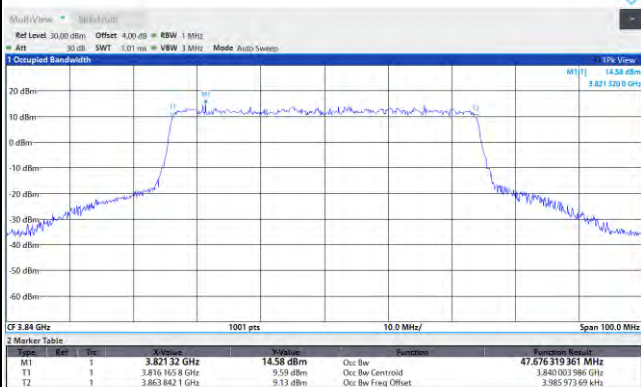
QPSK

16QAM



64QAM

256QAM

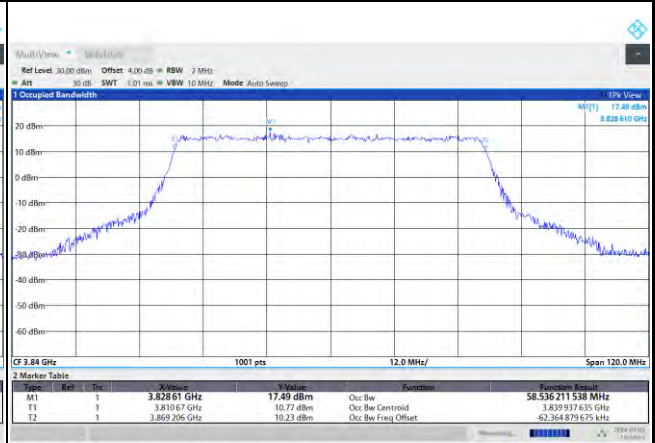




FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

QPSK

16QAM



64QAM

256QAM

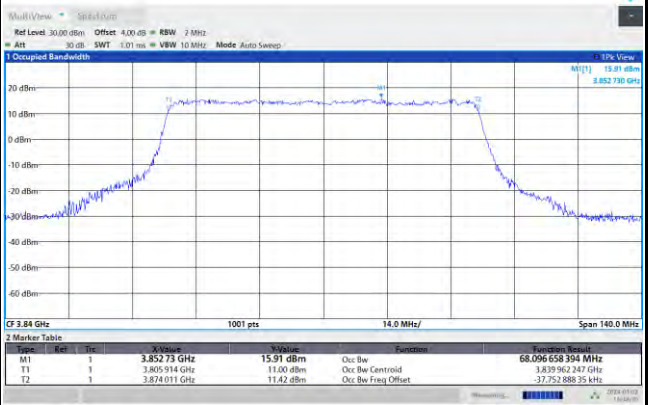
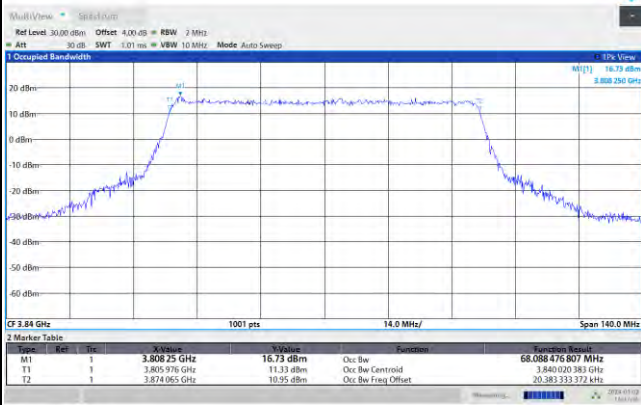




FR1 n77 / 70MHz / CP OFDM / Middle Channel / Full RB

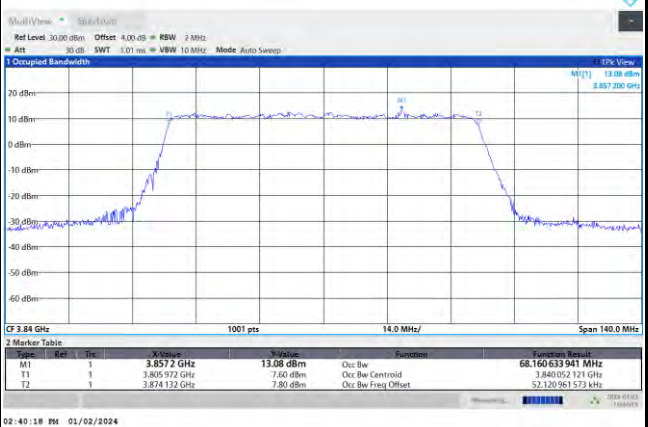
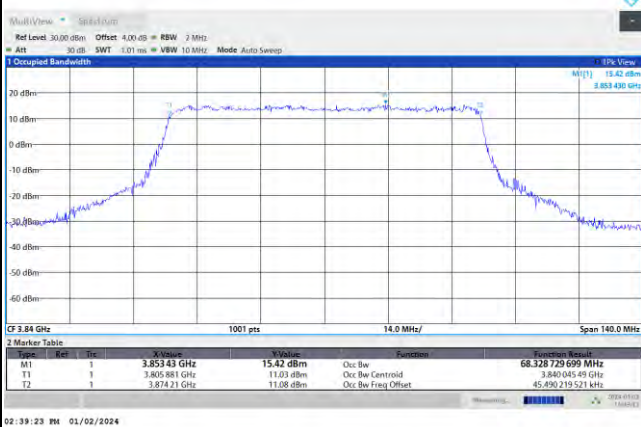
QPSK

16QAM



64QAM

256QAM

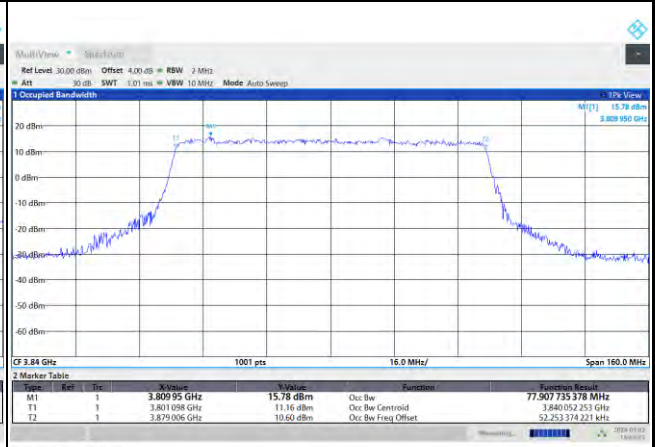
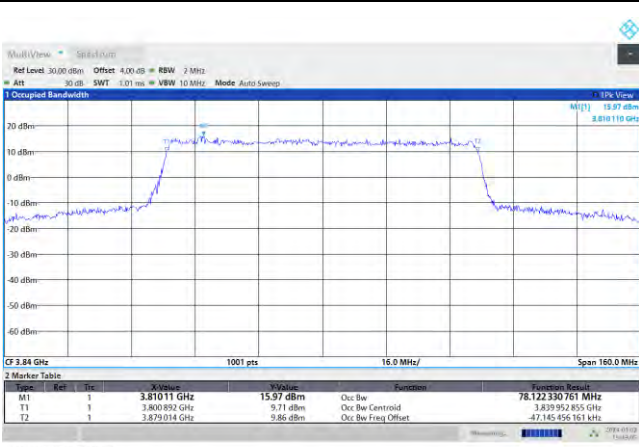




FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

QPSK

16QAM

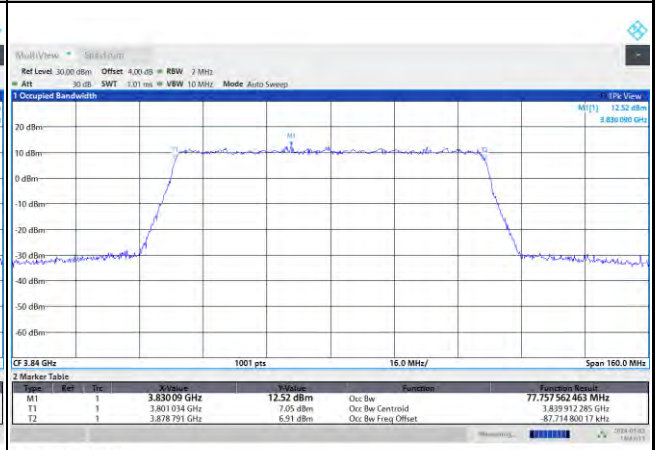
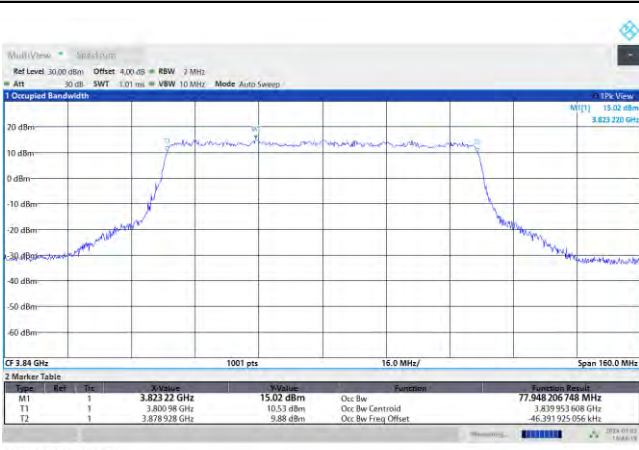


03:39:05 PM 01/02/2024

02:43:26 PM 01/02/2024

64QAM

256QAM



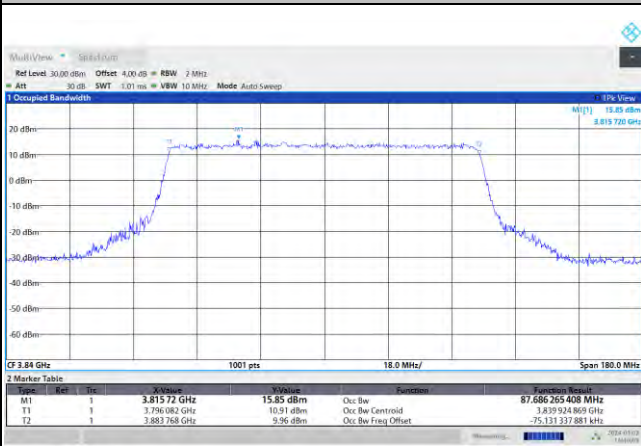
02:44:18 PM 01/02/2024

02:45:13 PM 01/02/2024



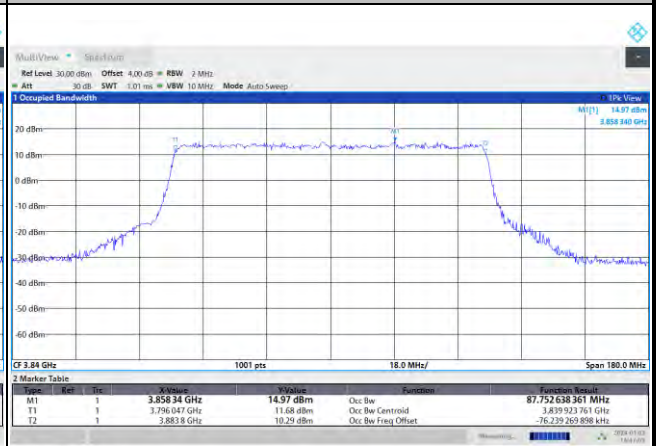
FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB

QPSK



02:46:10 PM 01/02/2024

16QAM



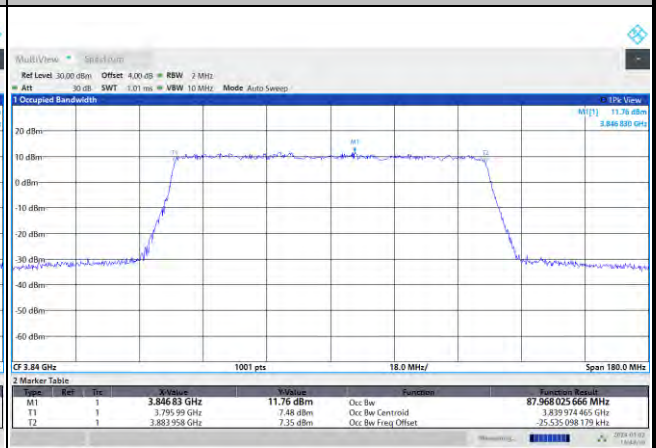
02:47:03 PM 01/02/2024

64QAM



02:47:56 PM 01/02/2024

256QAM



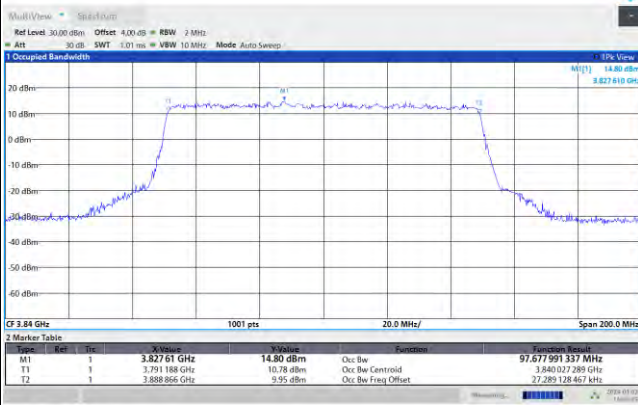
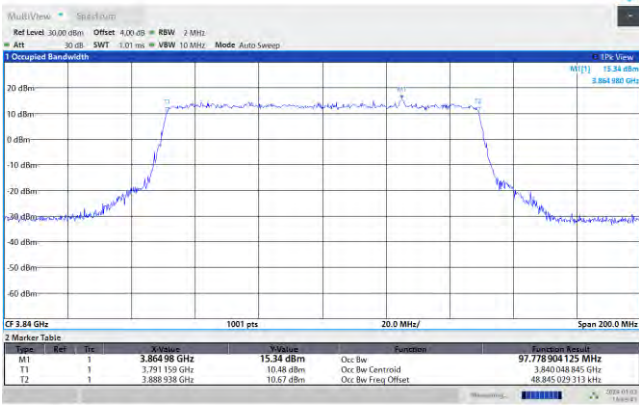
02:48:50 PM 01/02/2024



FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

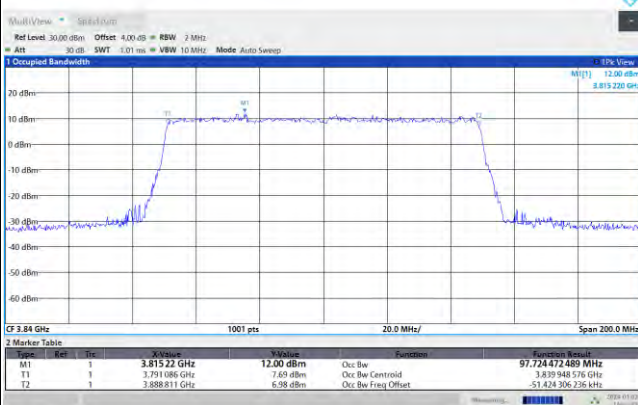
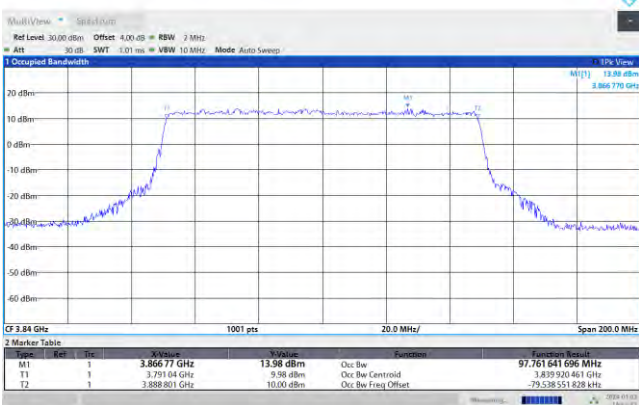
QPSK

16QAM



64QAM

256QAM



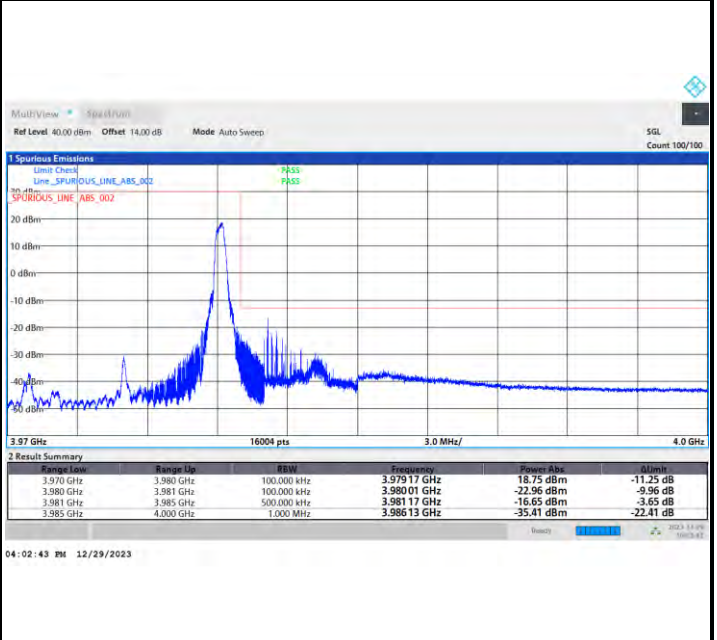
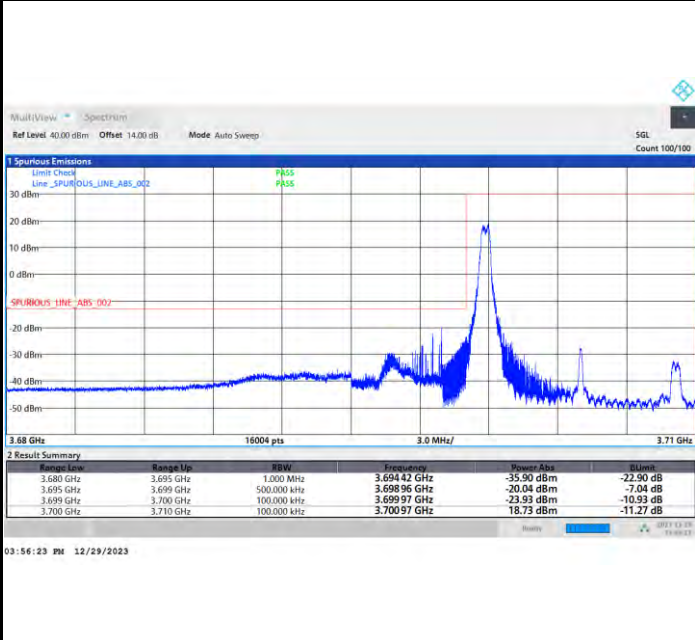


Conducted Band Edge

FR1 n77 / 10MHz / CP OFDM / QPSK

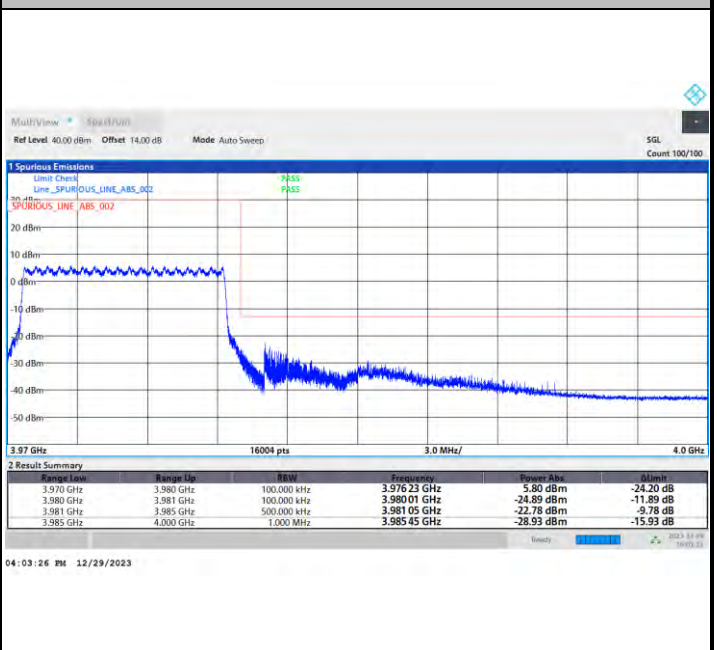
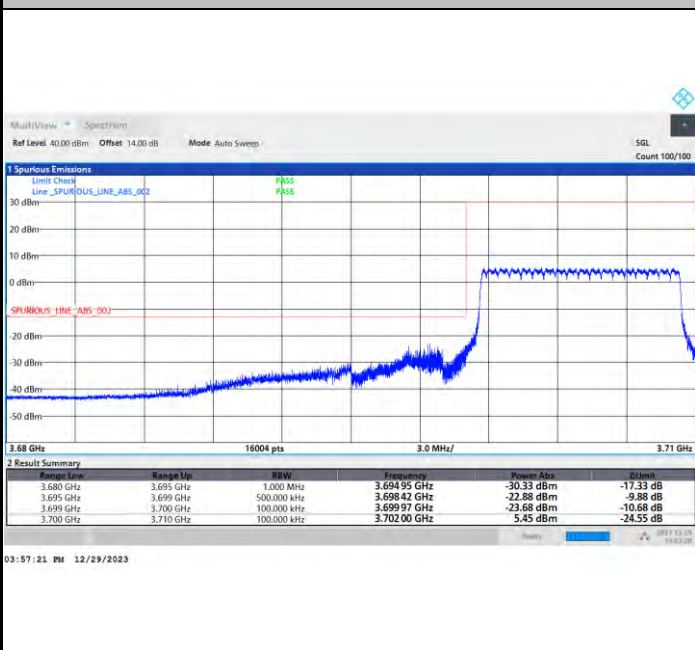
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

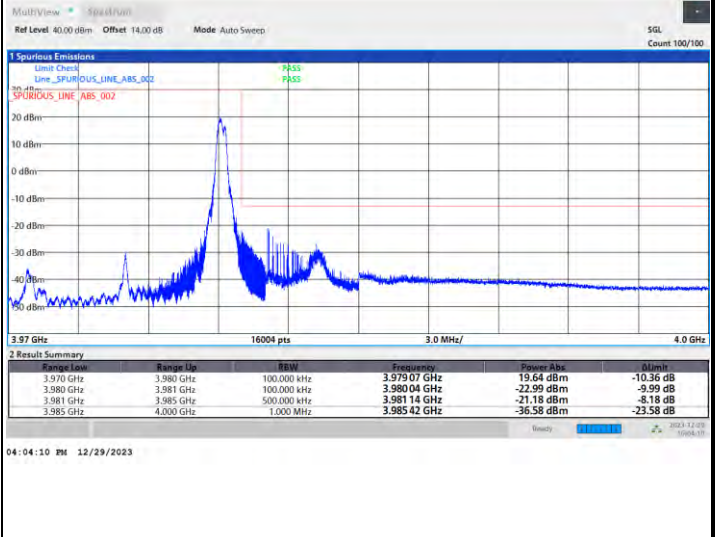
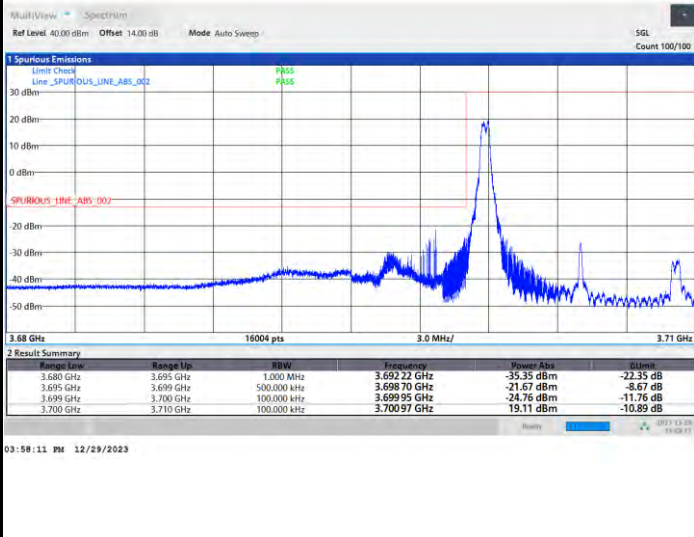




FR1 n77 / 10MHz / CP OFDM / 16QAM

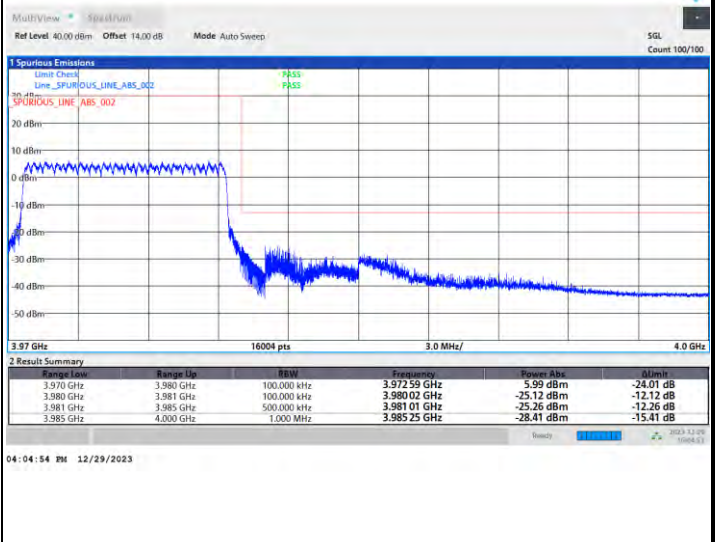
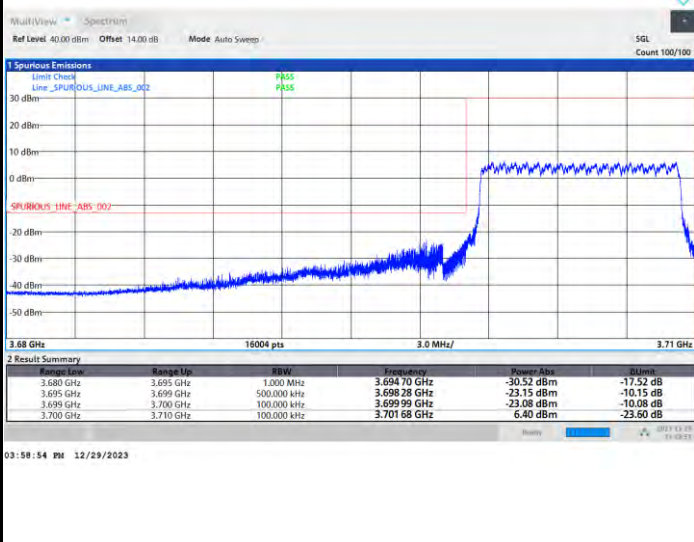
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

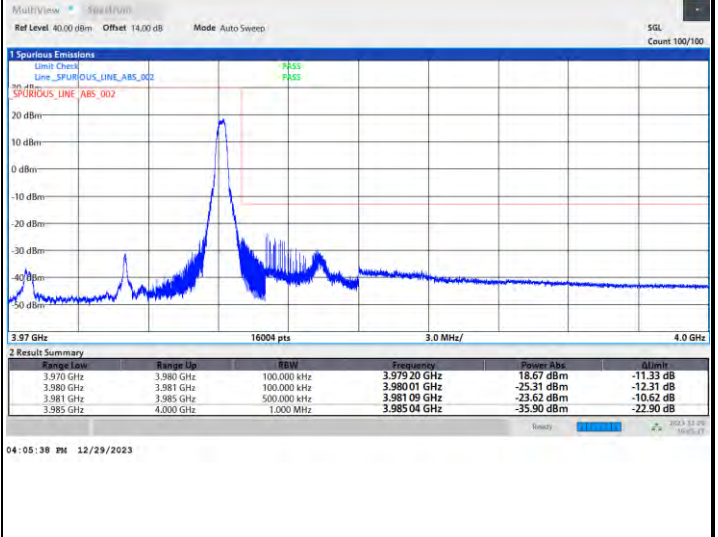
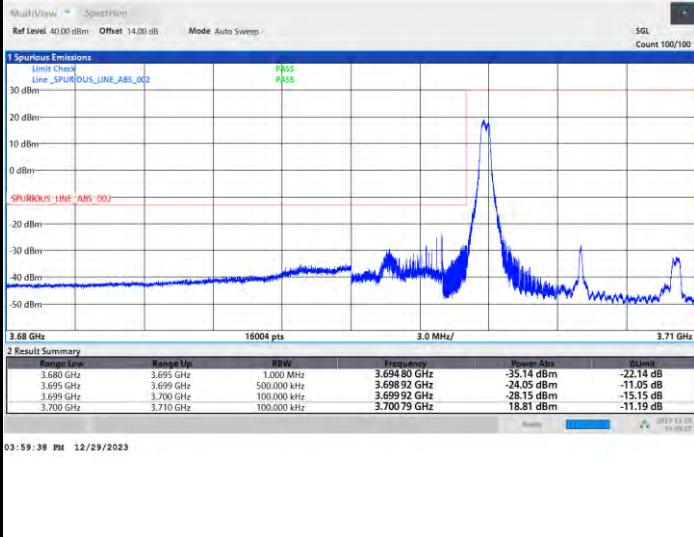




FR1 n77 / 10MHz / CP OFDM / 64QAM

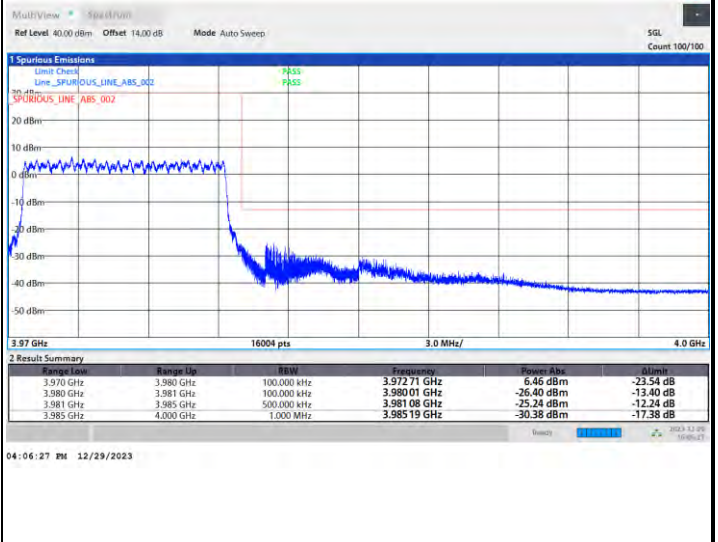
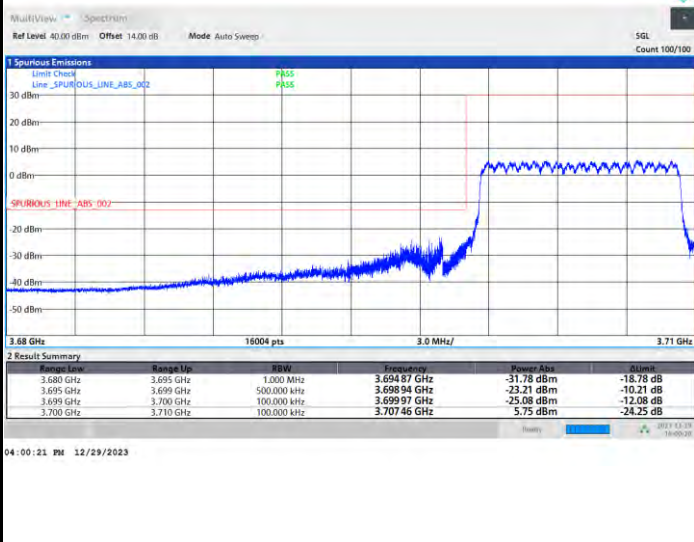
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

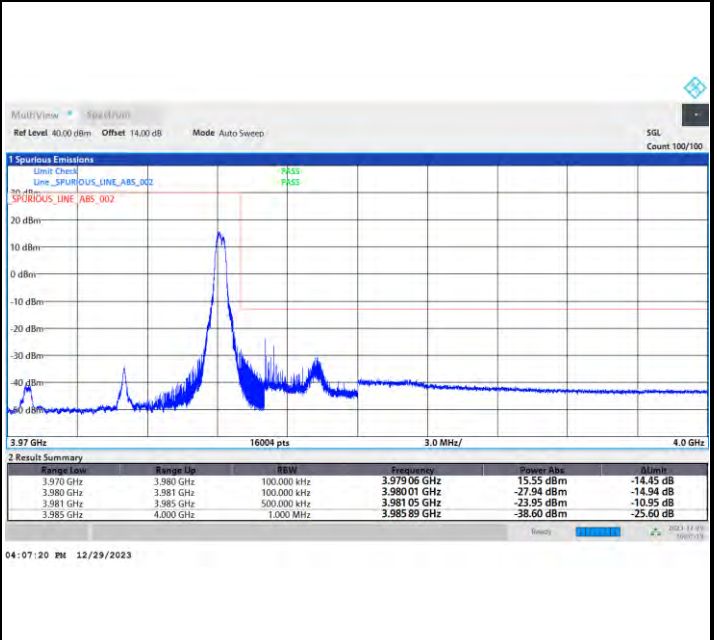
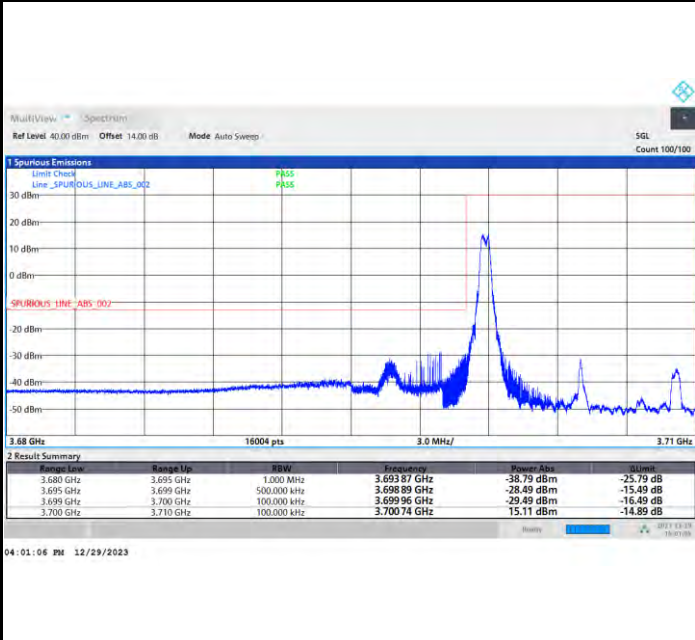




FR1 n77 / 10MHz / CP OFDM / 256QAM

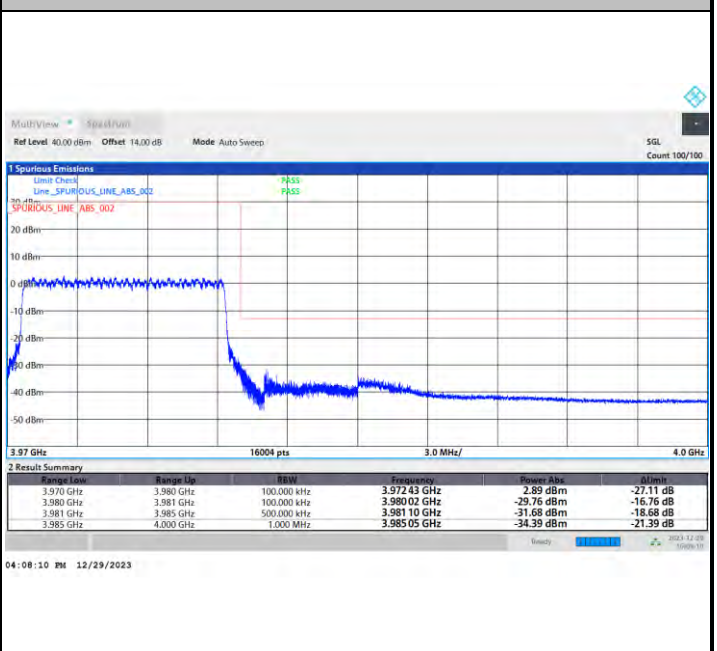
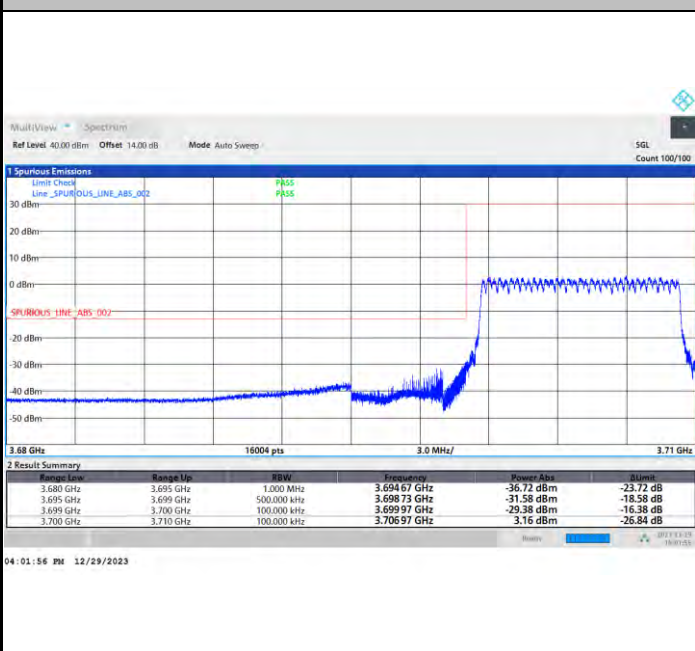
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

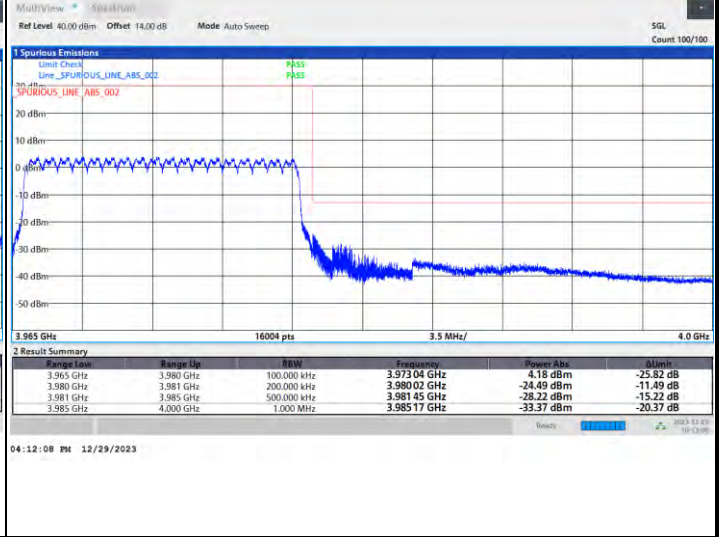
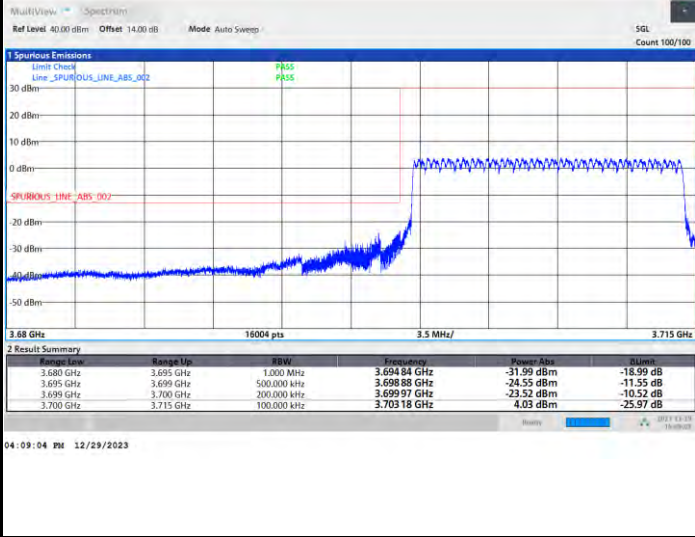




FR1 n77 / 15MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

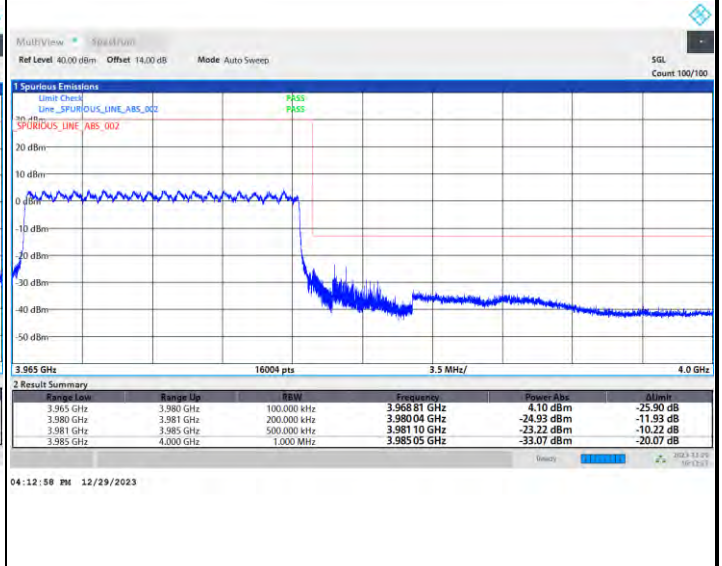
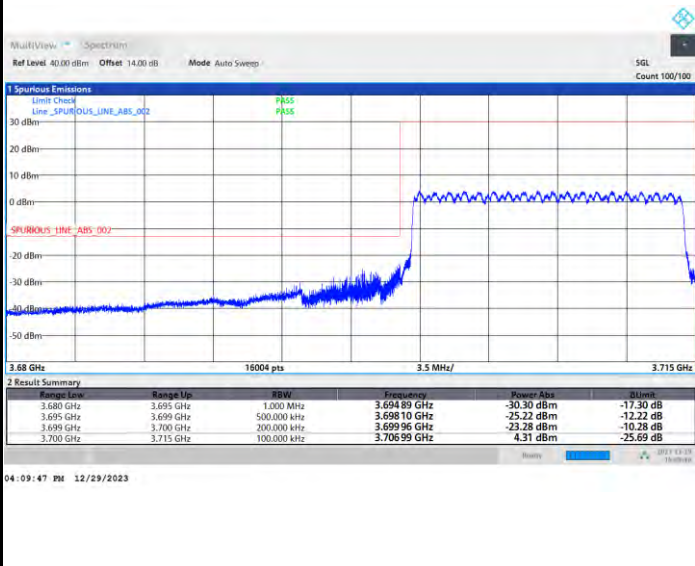
Highest Band Edge / Full RB



FR1 n77 / 15MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

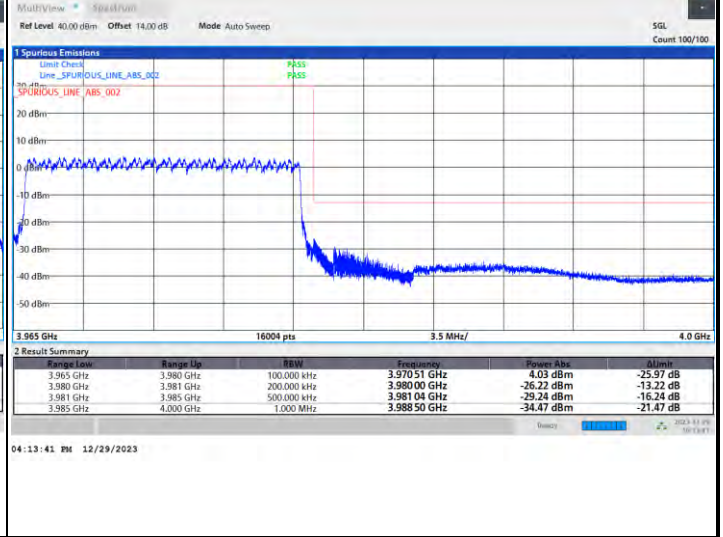
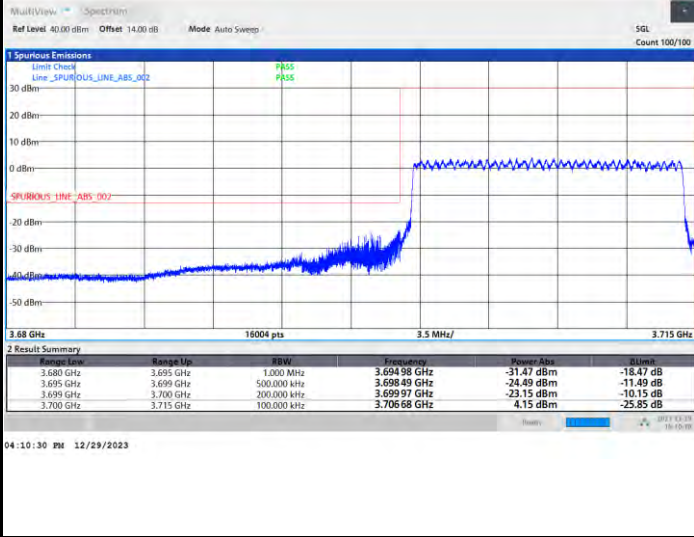




FR1 n77 / 15MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

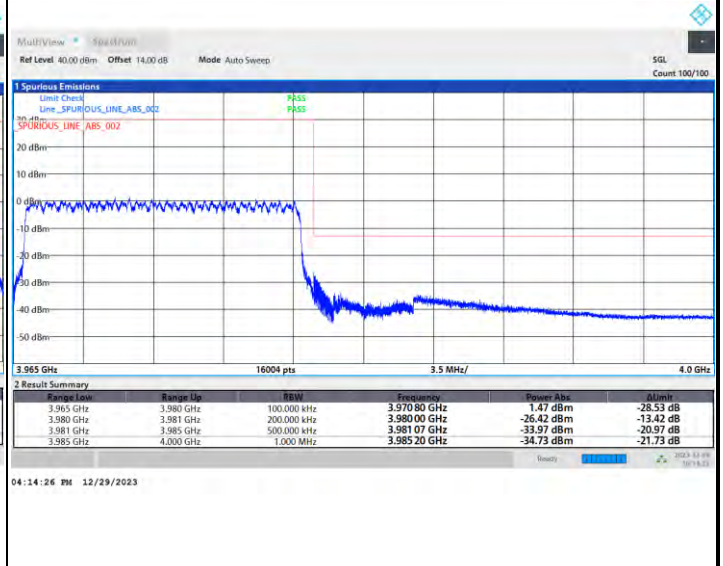
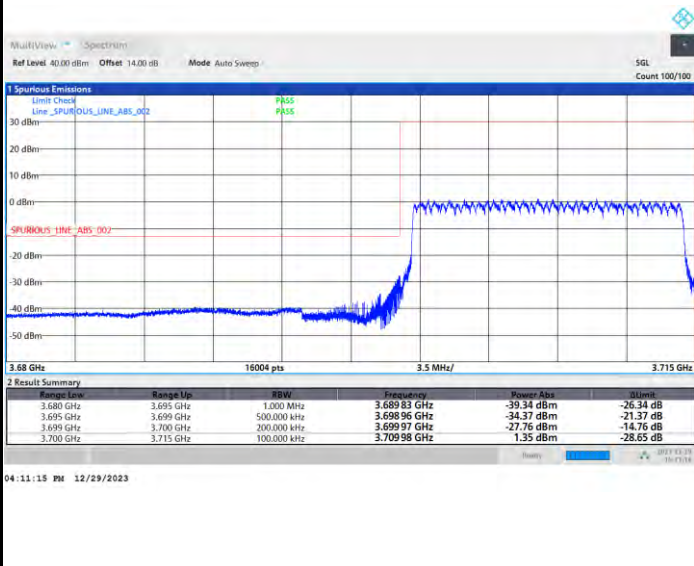
Highest Band Edge / Full RB



FR1 n77 / 15MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

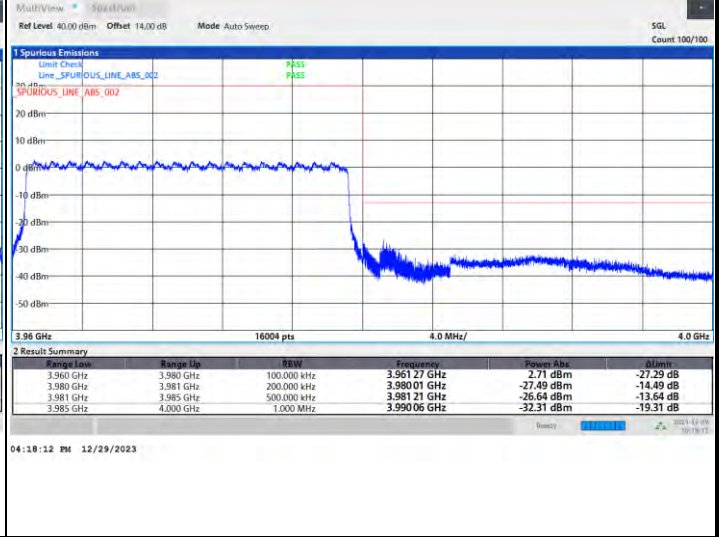
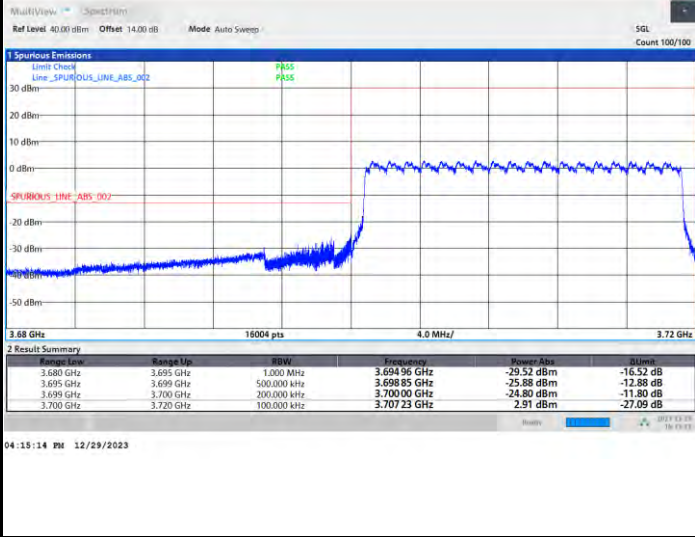




FR1 n77 / 20MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

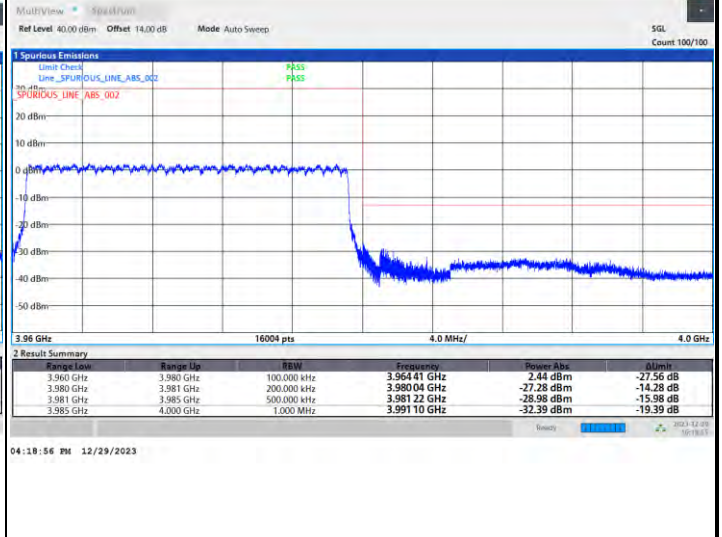
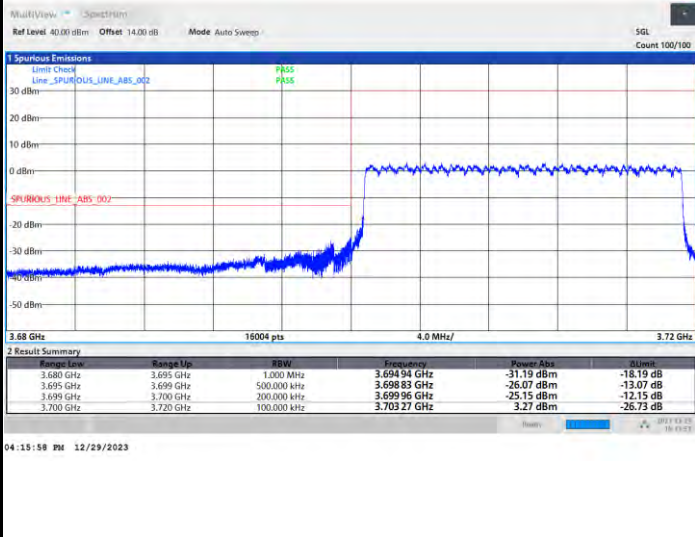
Highest Band Edge / Full RB



FR1 n77 / 20MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

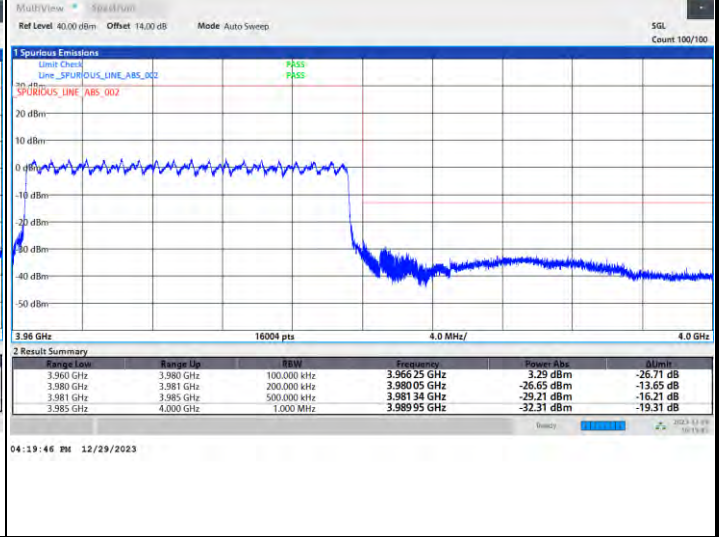
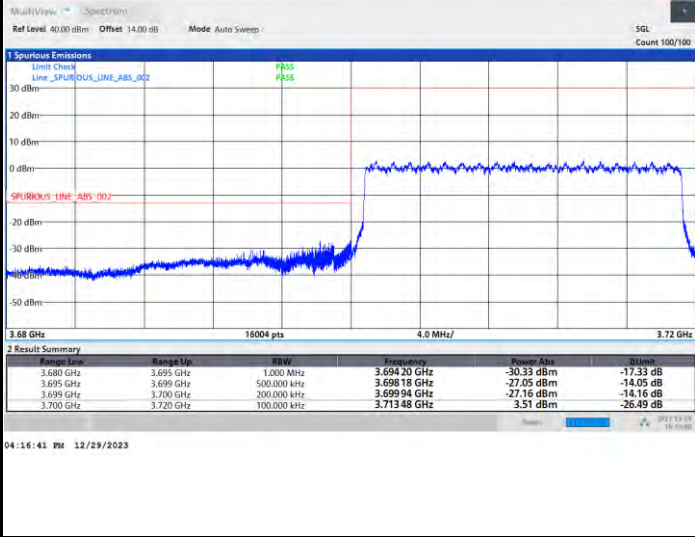




FR1 n77 / 20MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

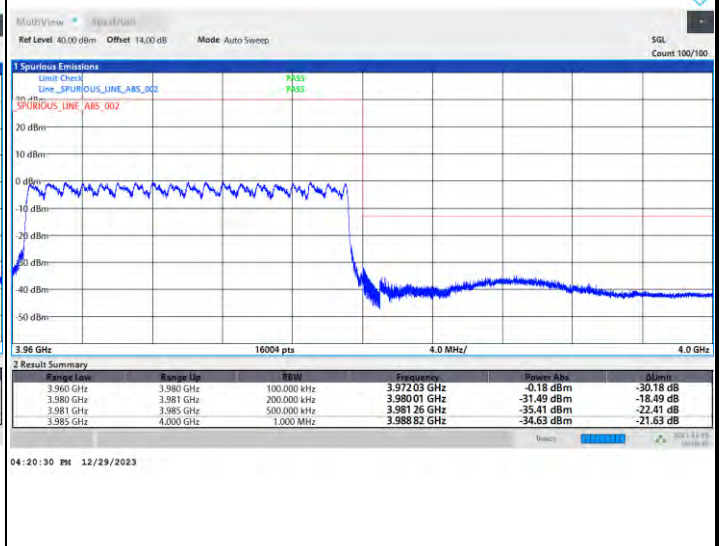
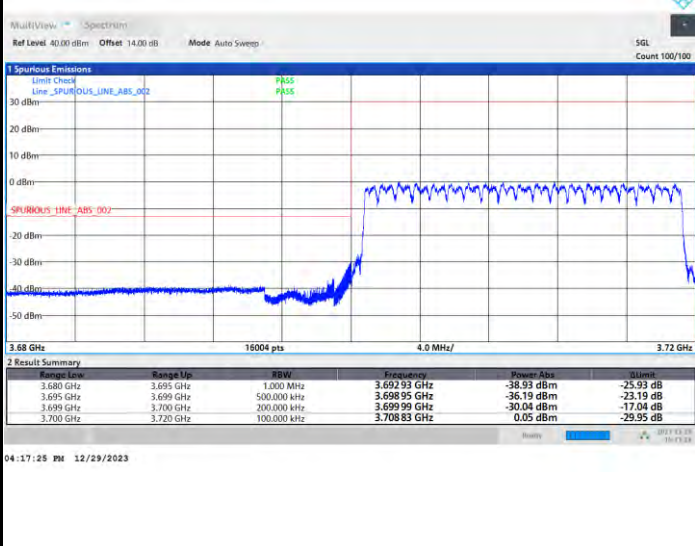
Highest Band Edge / Full RB



FR1 n77 / 20MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

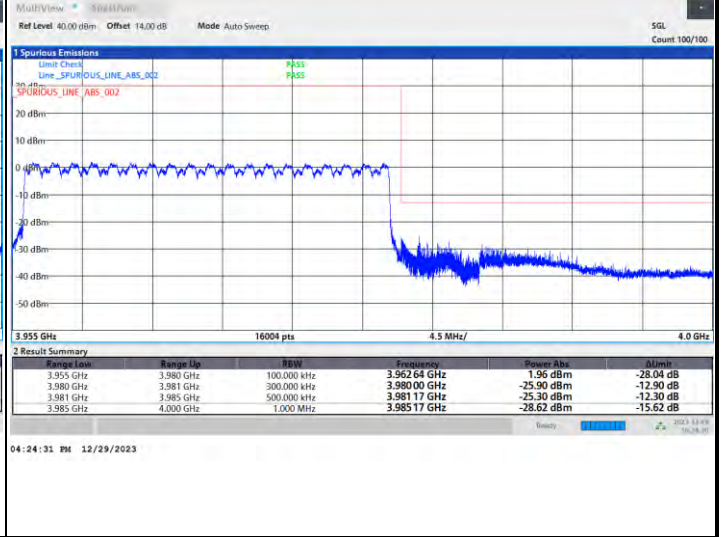
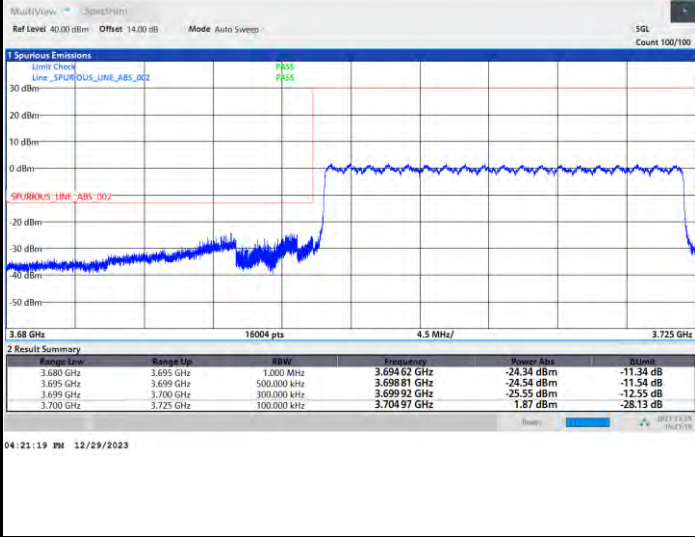




FR1 n77 / 25MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

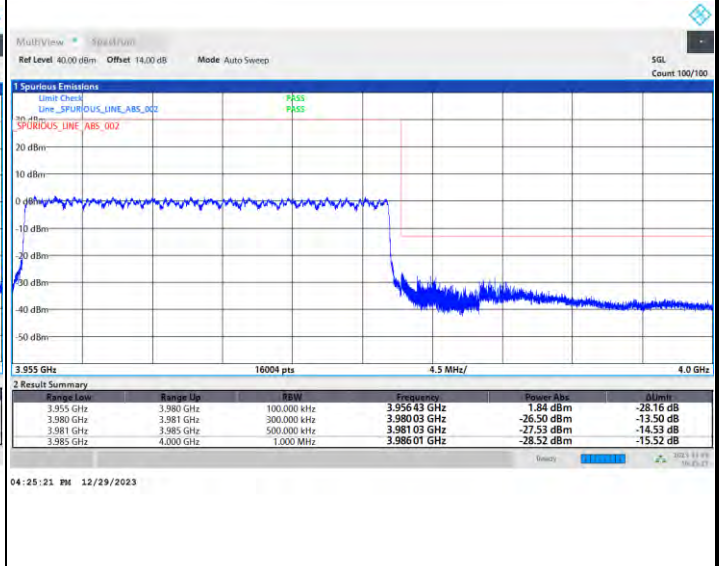
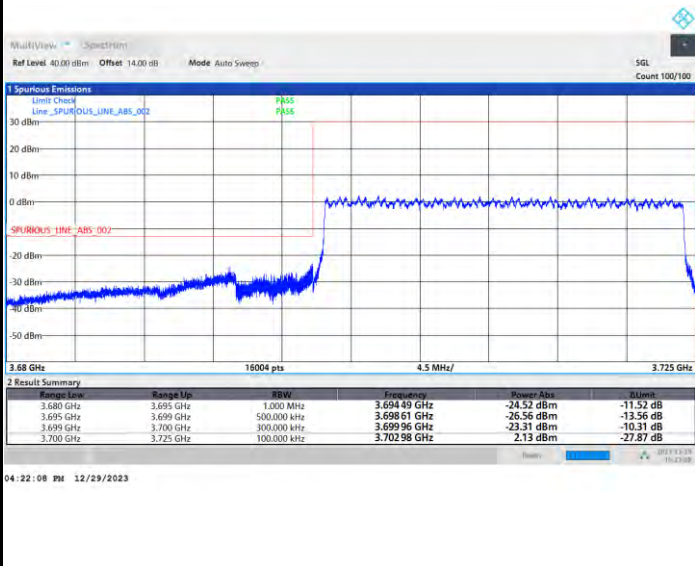
Highest Band Edge / Full RB



FR1 n77 / 25MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

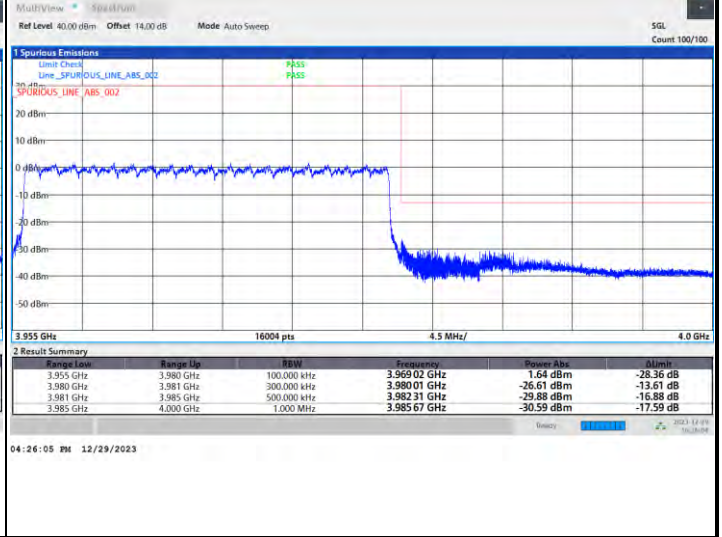
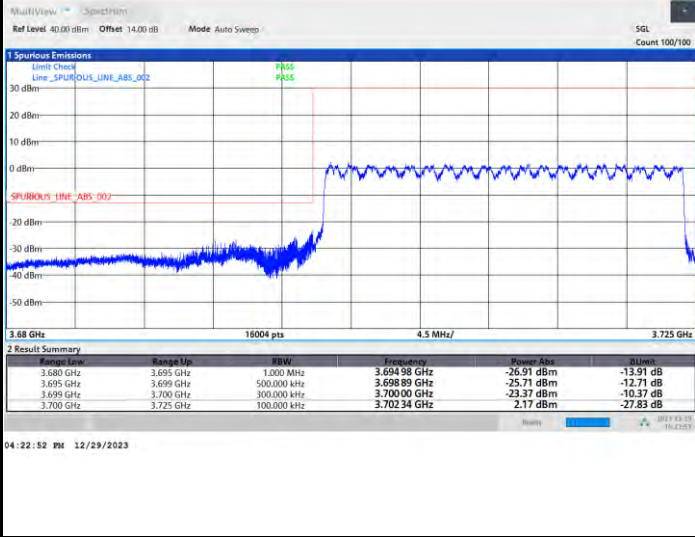




FR1 n77 / 25MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

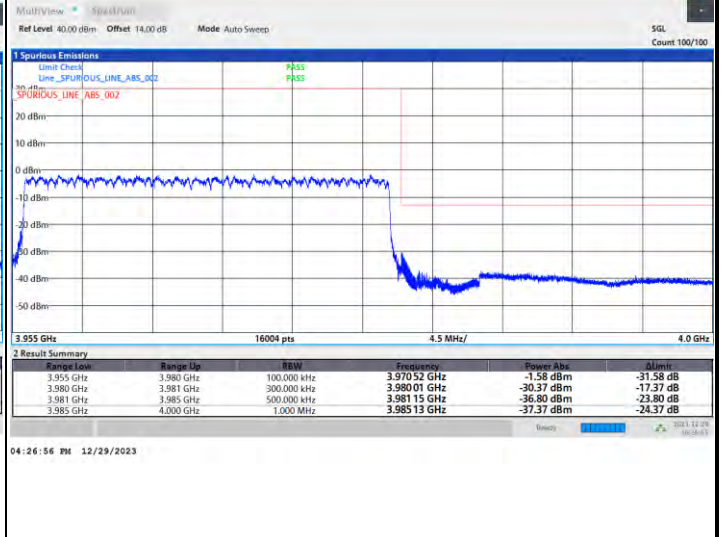
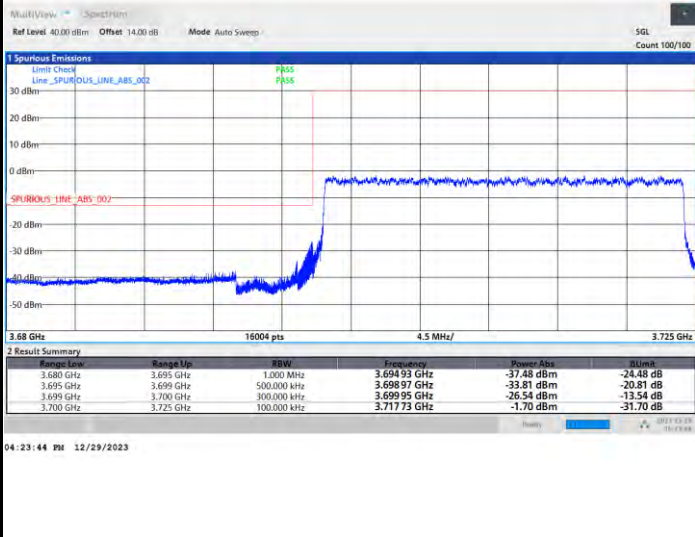
Highest Band Edge / Full RB



FR1 n77 / 25MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

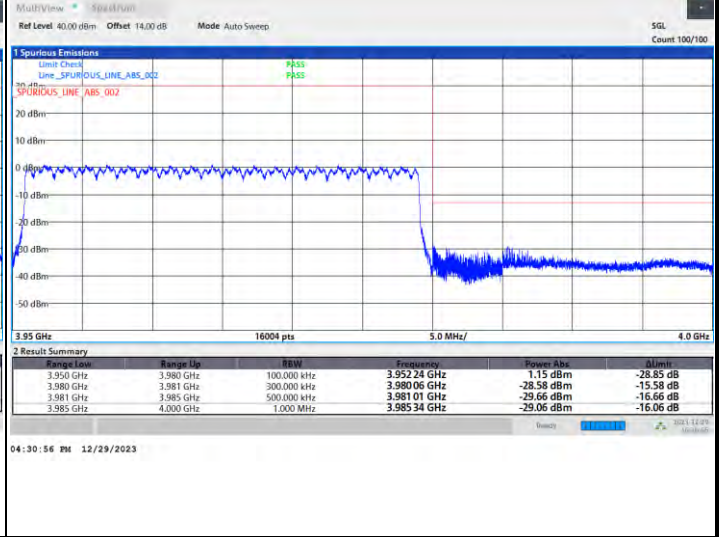
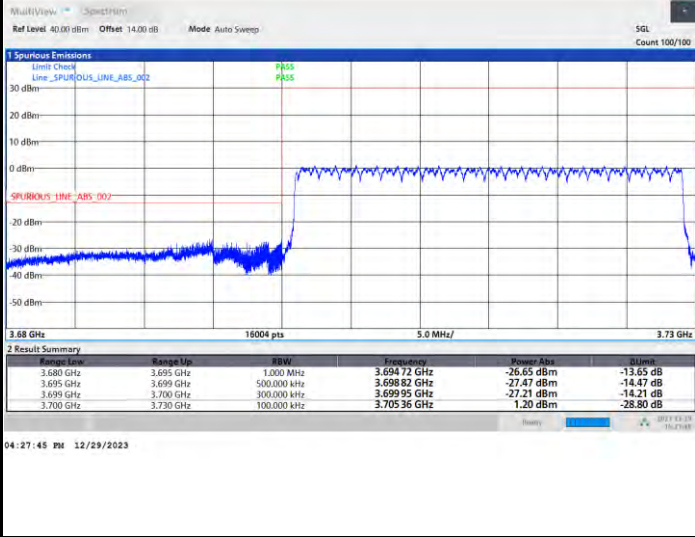




FR1 n77 / 30MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

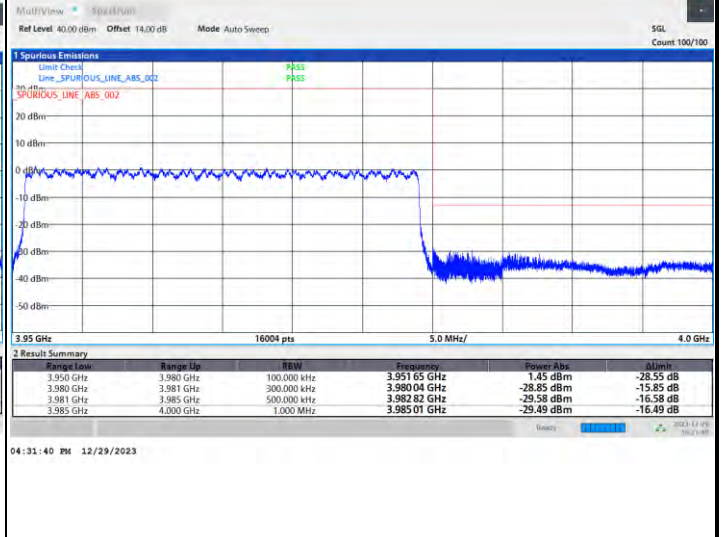
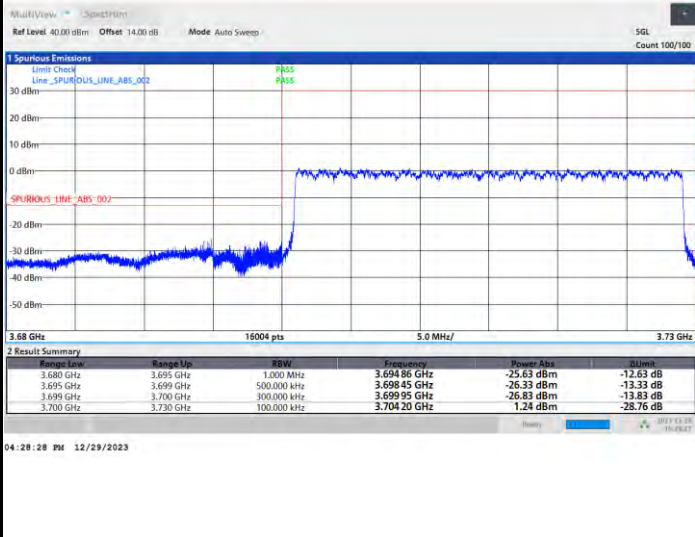
Highest Band Edge / Full RB



FR1 n77 / 30MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

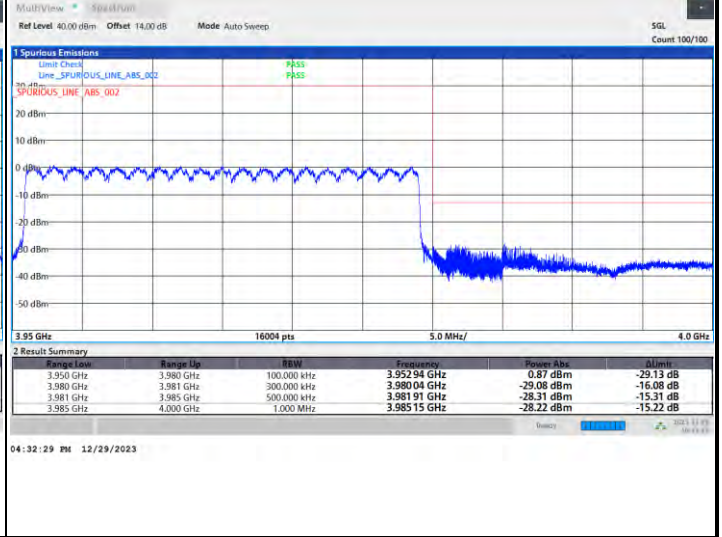
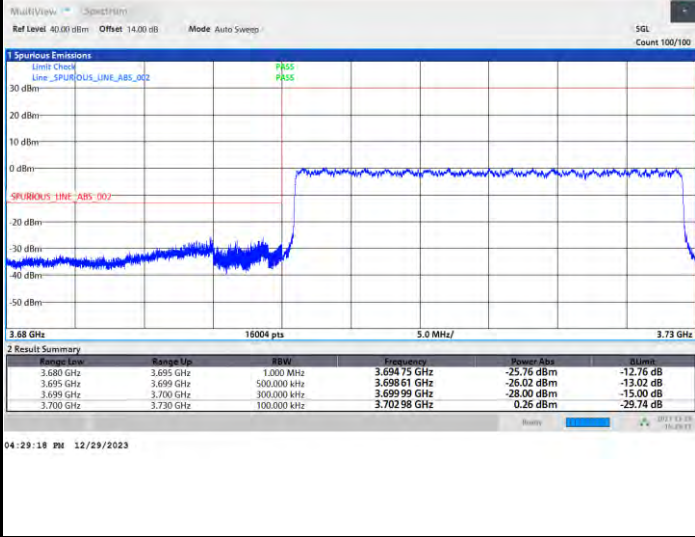




FR1 n77 / 30MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

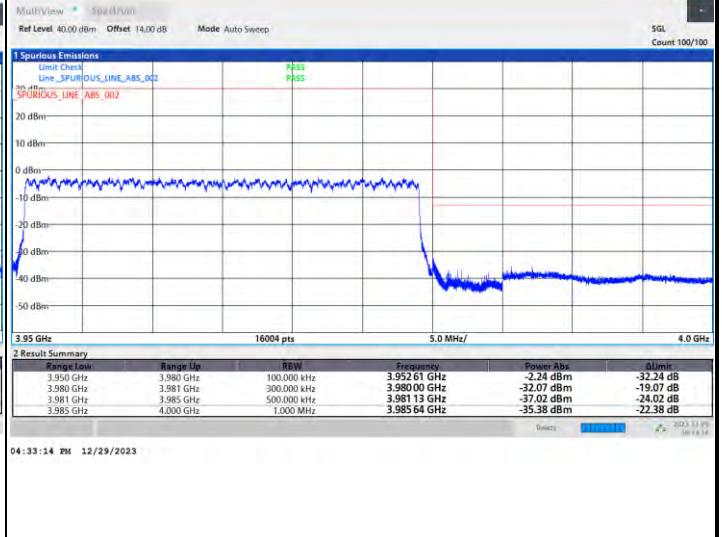
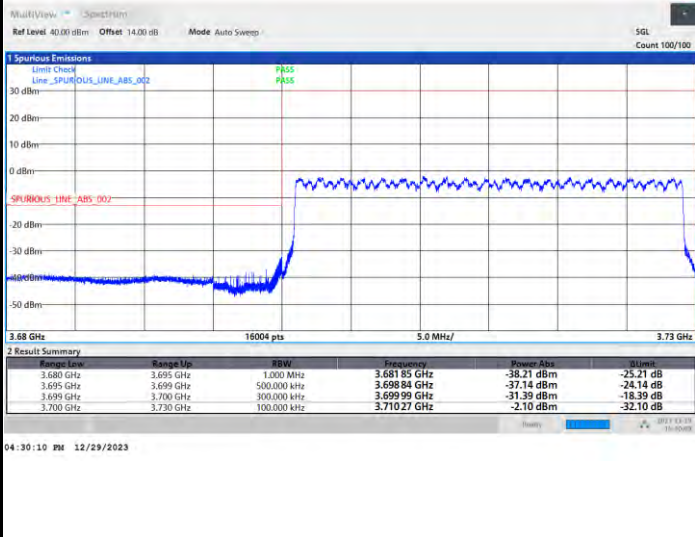
Highest Band Edge / Full RB



FR1 n77 / 30MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

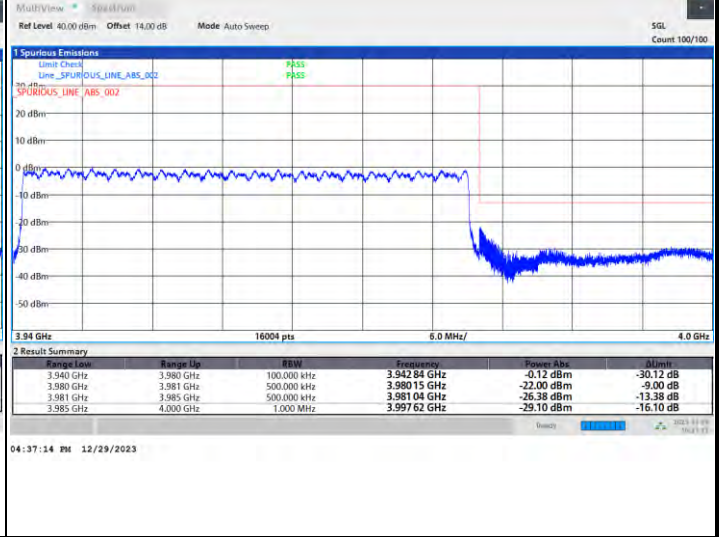
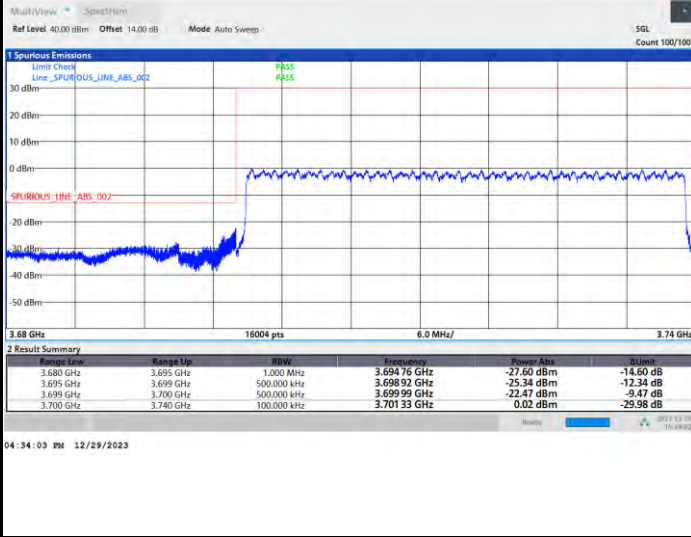




FR1 n77 / 40MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

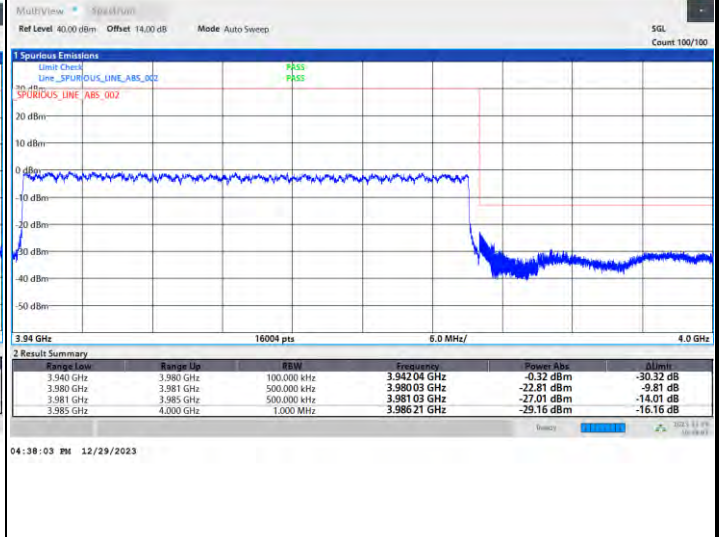
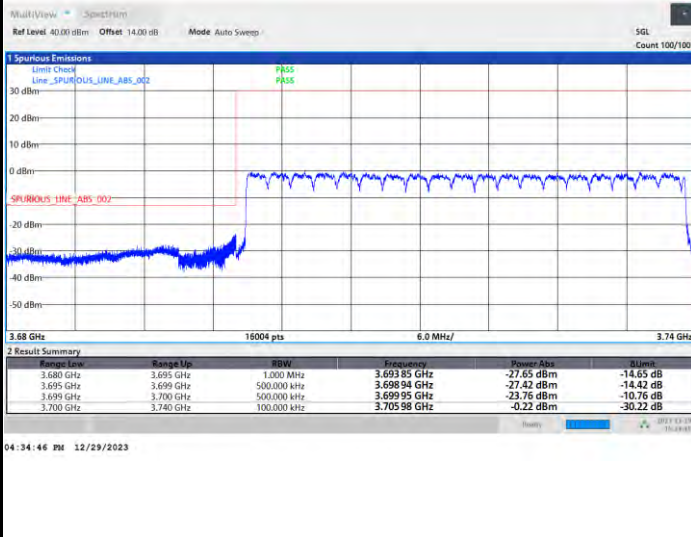
Highest Band Edge / Full RB



FR1 n77 / 40MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

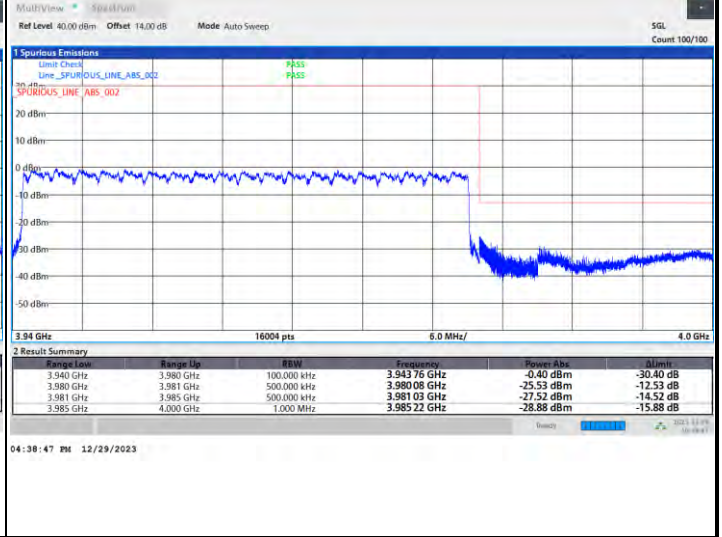
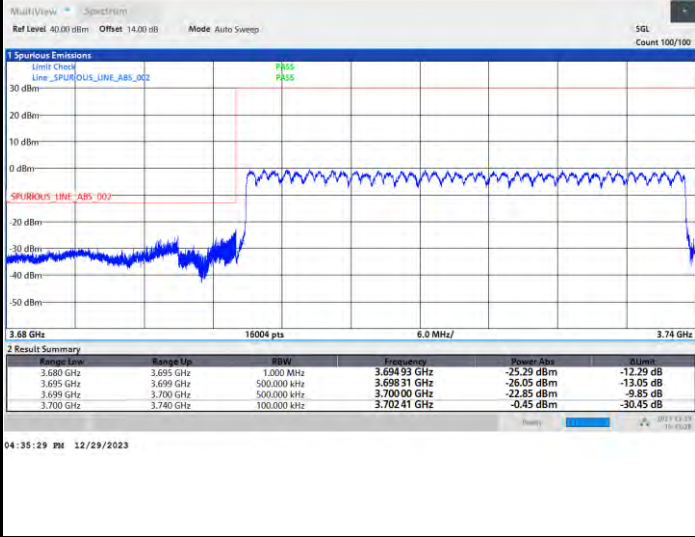




FR1 n77 / 40MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

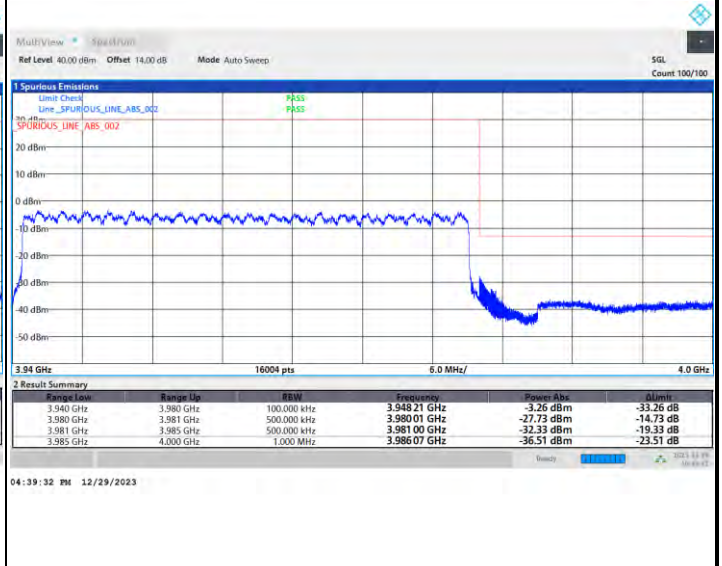
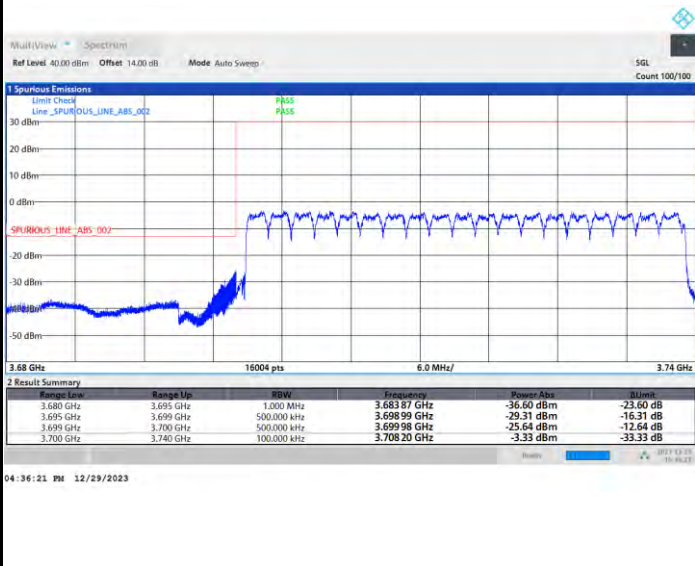
Highest Band Edge / Full RB



FR1 n77 / 40MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

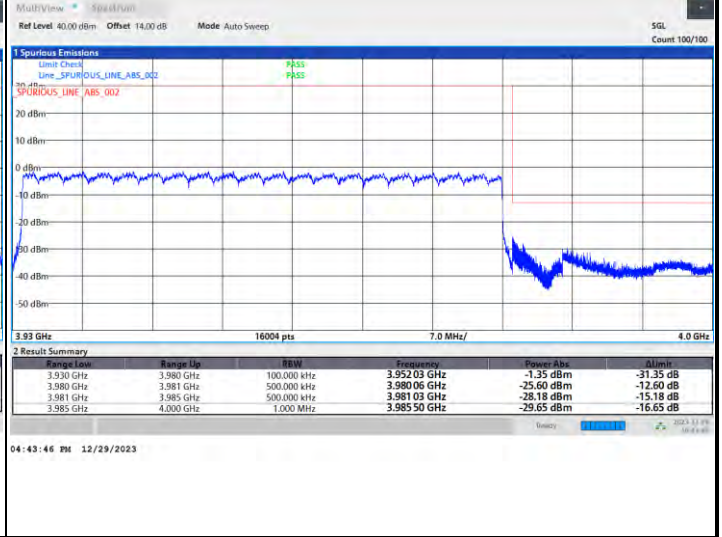
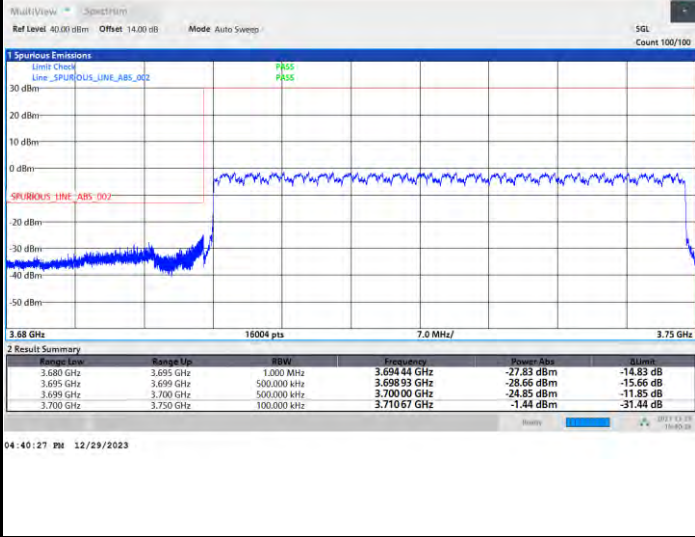




FR1 n77 / 50MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

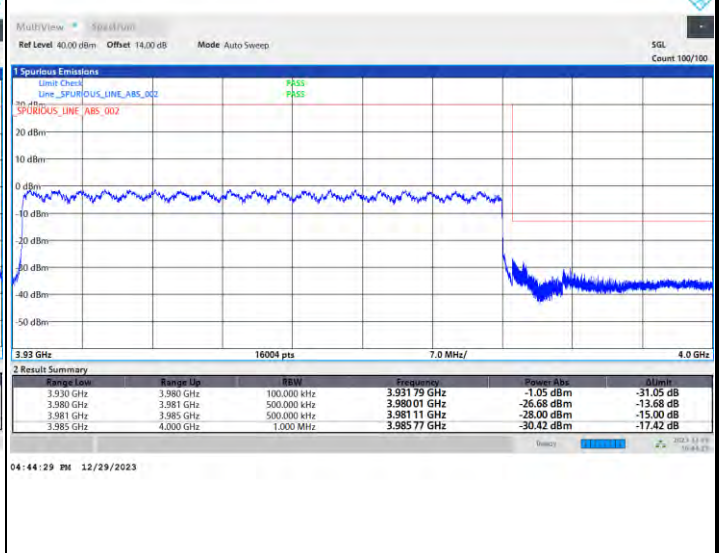
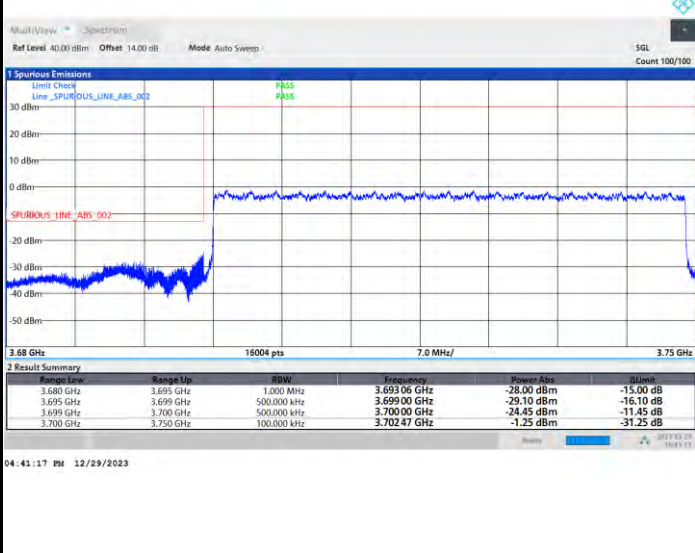
Highest Band Edge / Full RB



FR1 n77 / 50MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

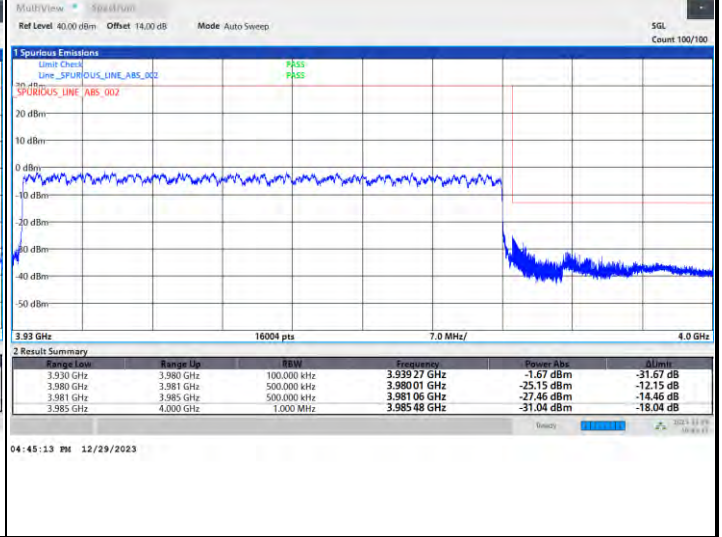
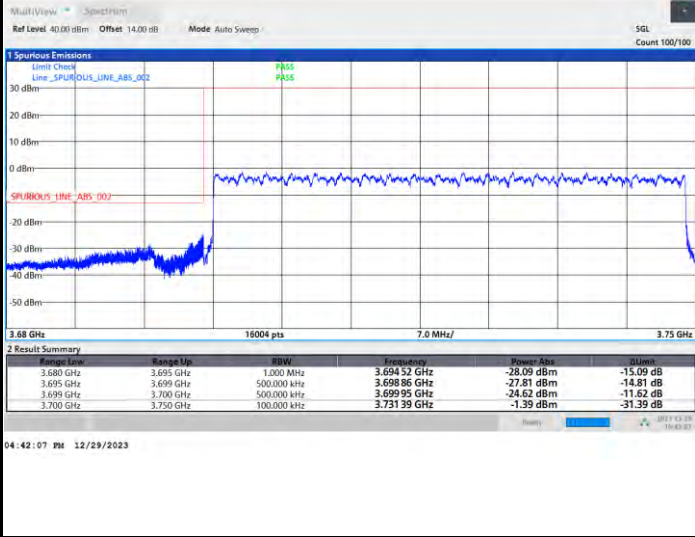




FR1 n77 / 50MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

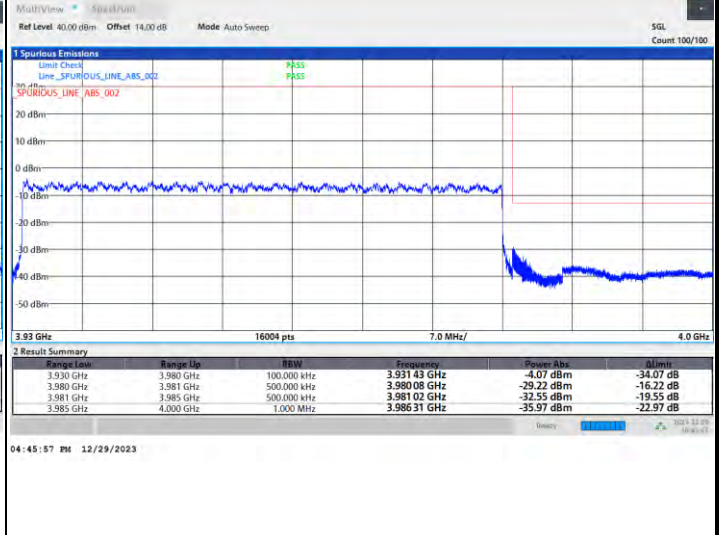
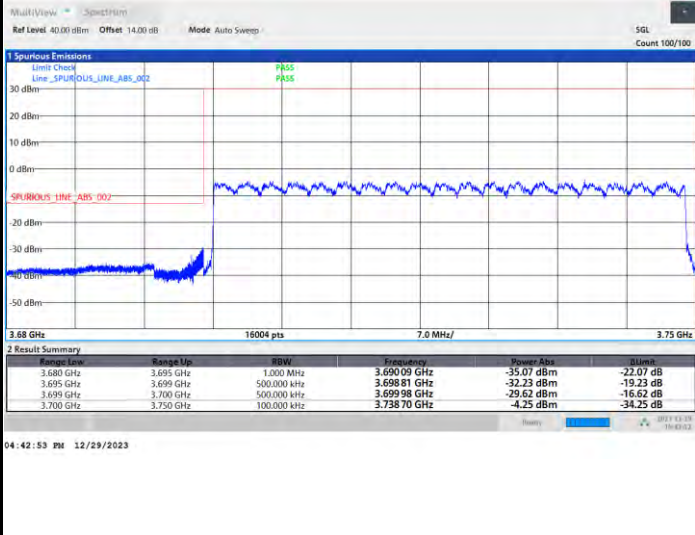
Highest Band Edge / Full RB



FR1 n77 / 50MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

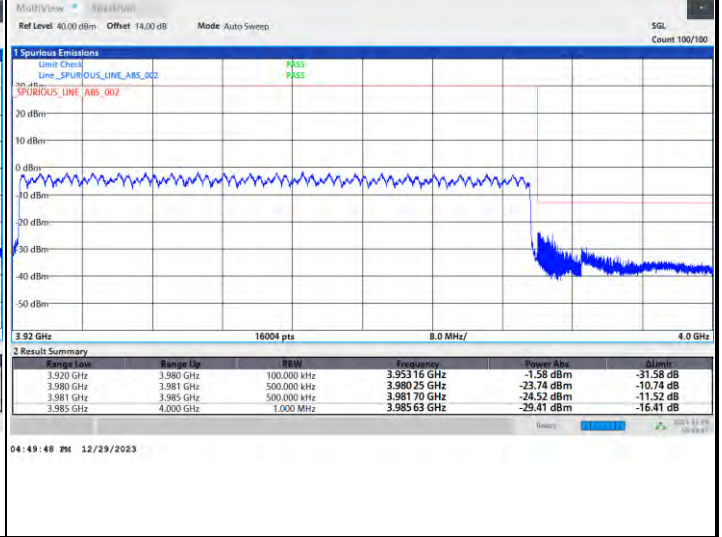
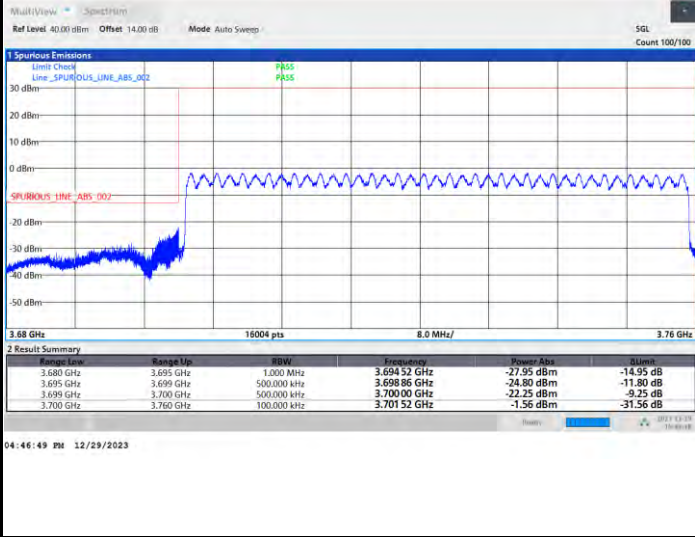




FR1 n77 / 60MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

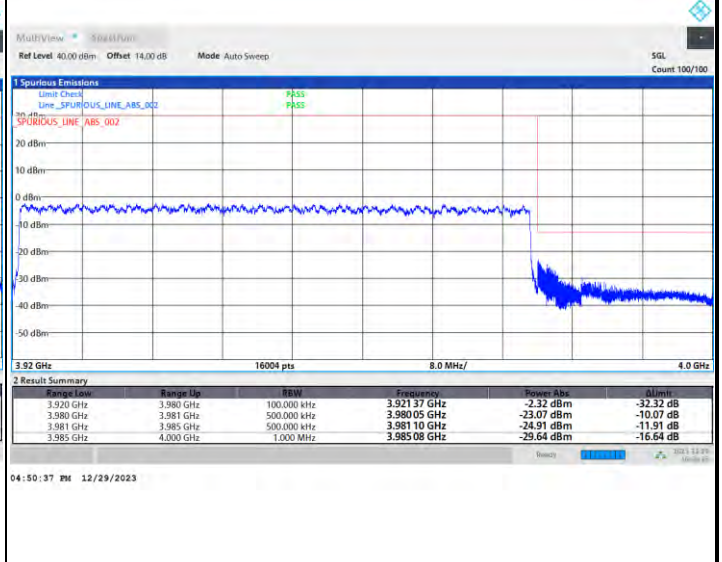
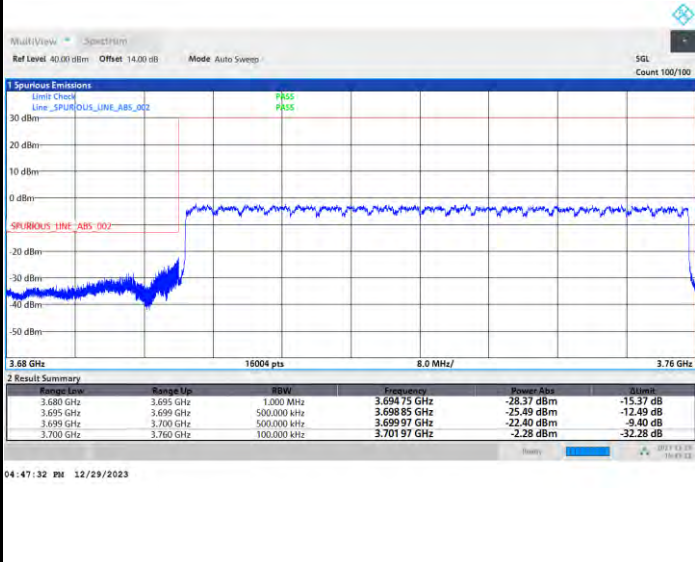
Highest Band Edge / Full RB



FR1 n77 / 60MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

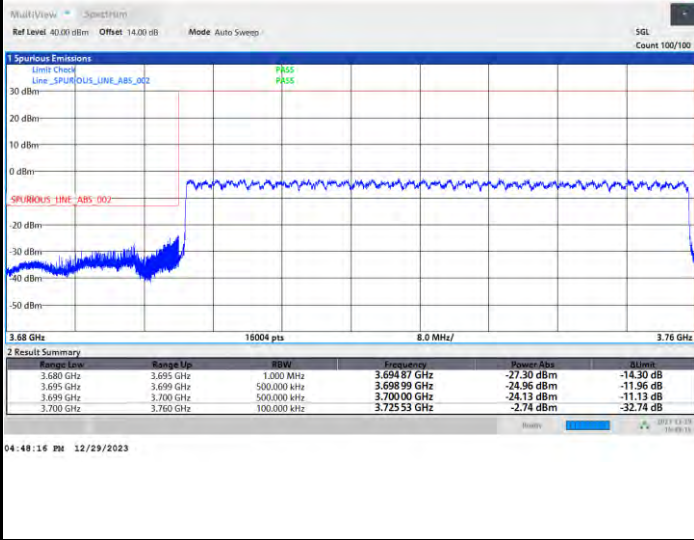




FR1 n77 / 60MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

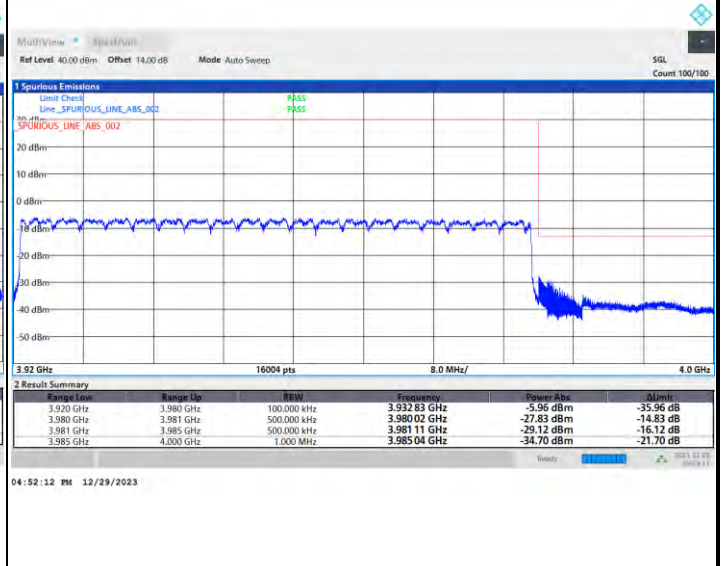
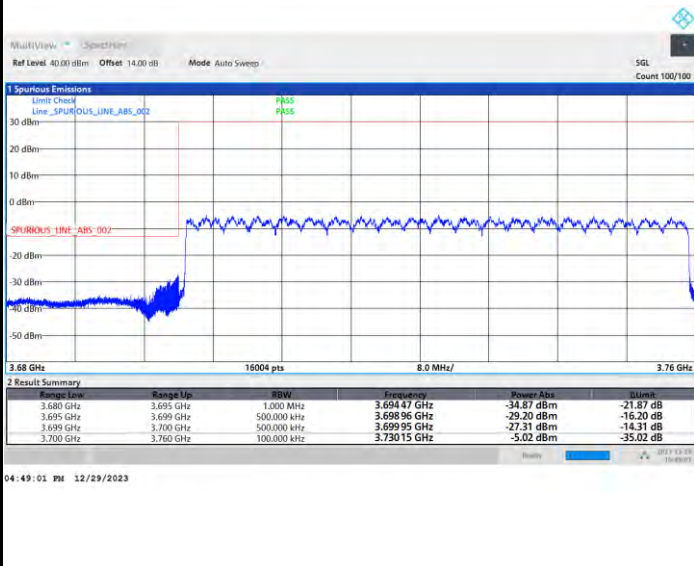
Highest Band Edge / Full RB



FR1 n77 / 60MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

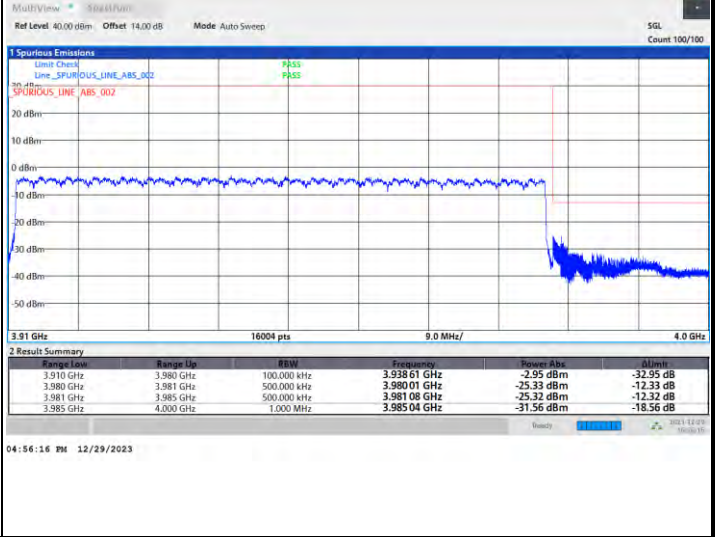
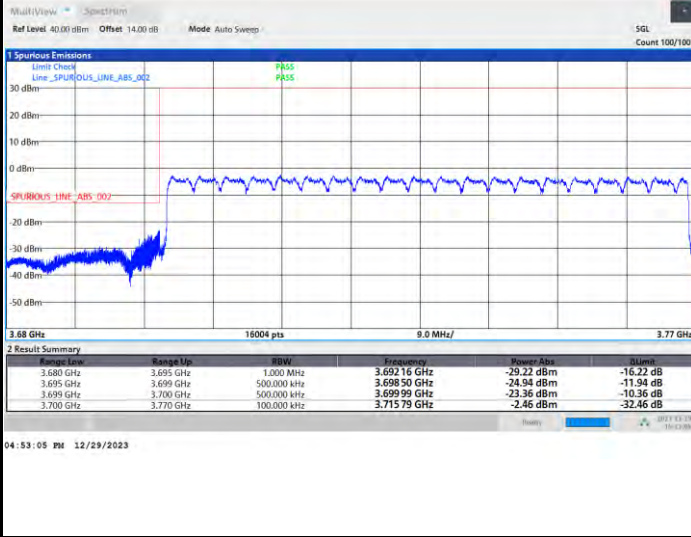




FR1 n77 / 70MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

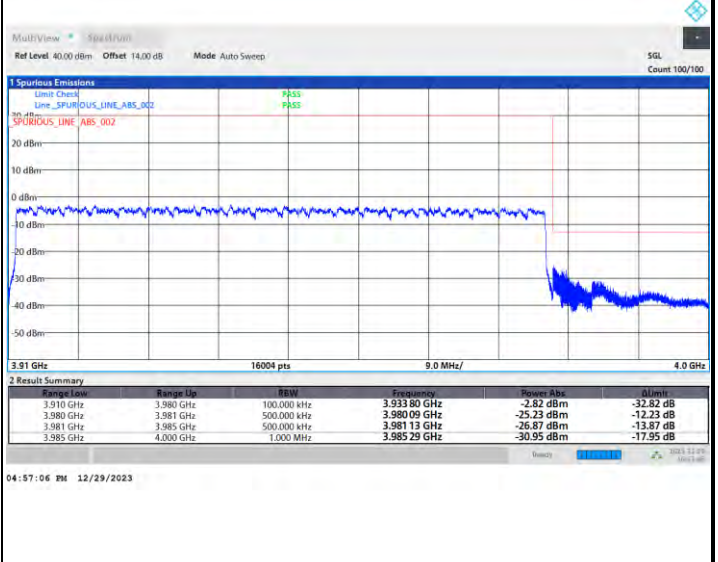
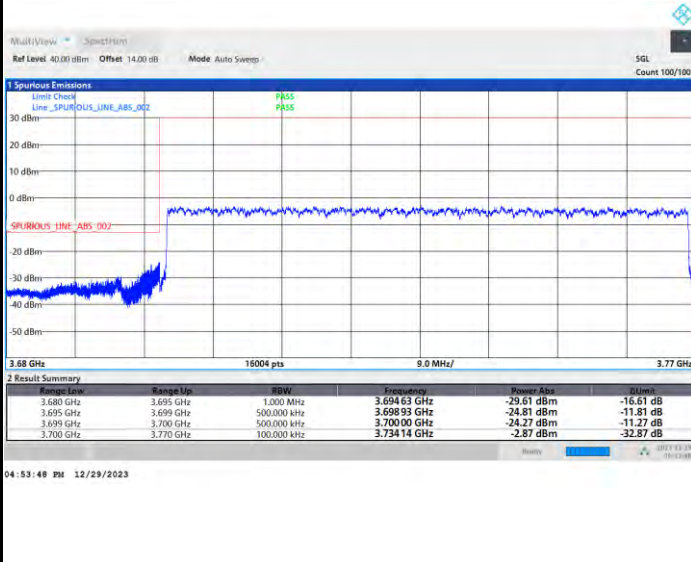
Highest Band Edge / Full RB



FR1 n77 / 70MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

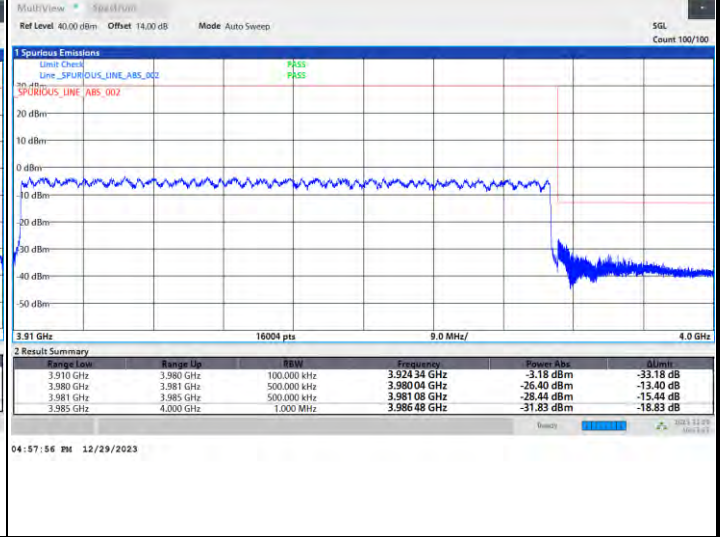
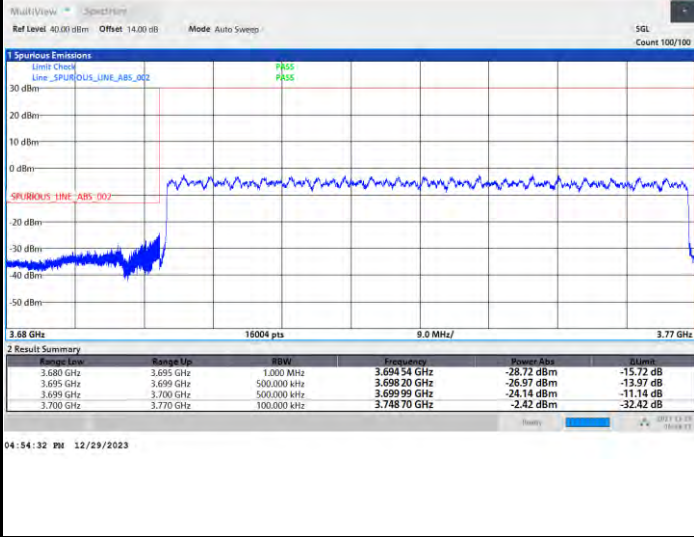




FR1 n77 / 70MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

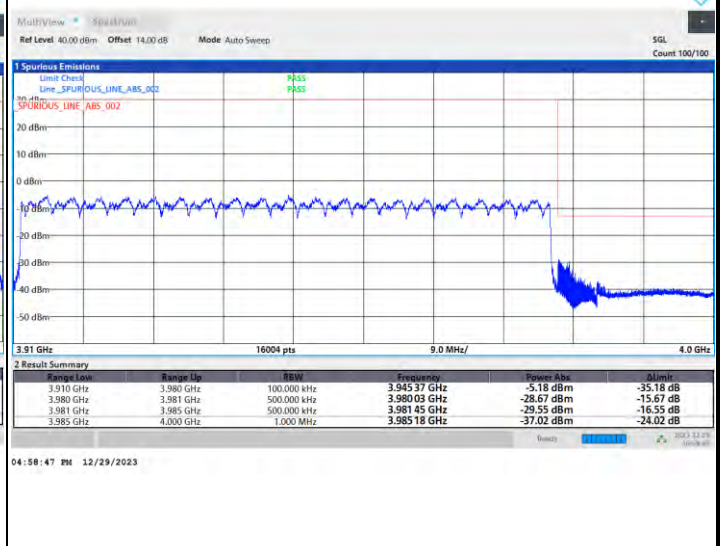
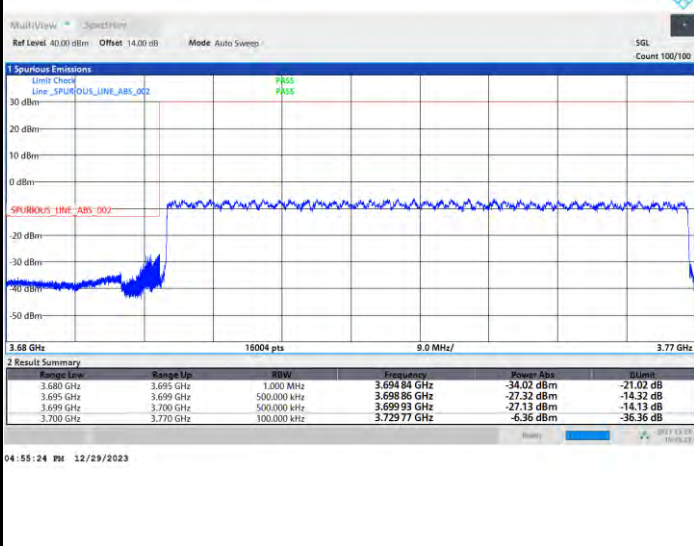
Highest Band Edge / Full RB



FR1 n77 / 70MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

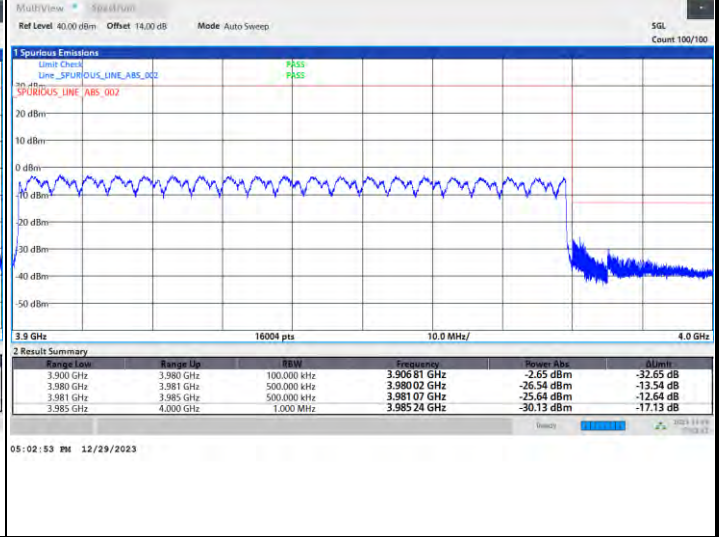
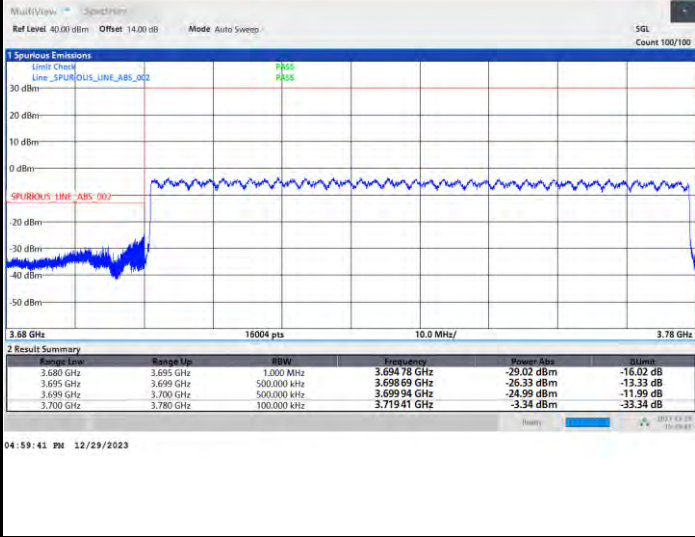




FR1 n77 / 80MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

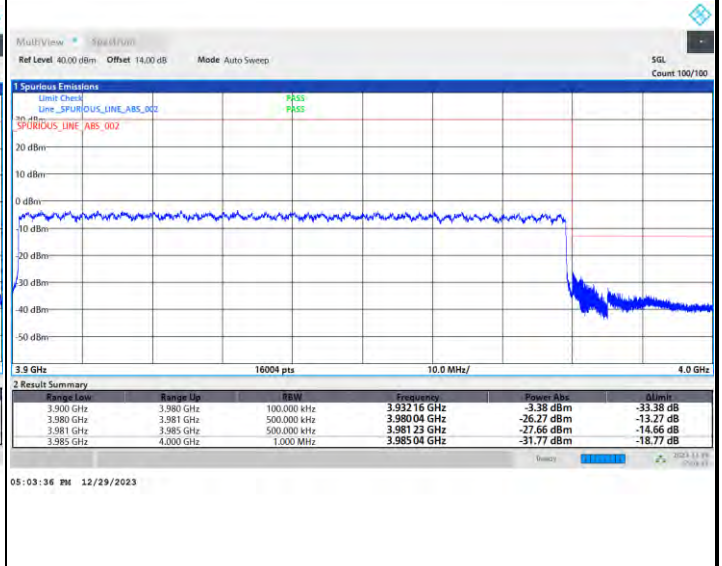
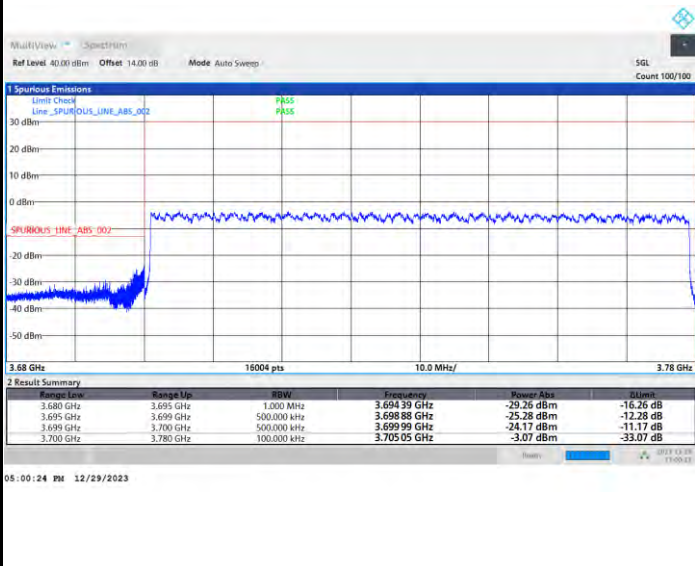
Highest Band Edge / Full RB



FR1 n77 / 80MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

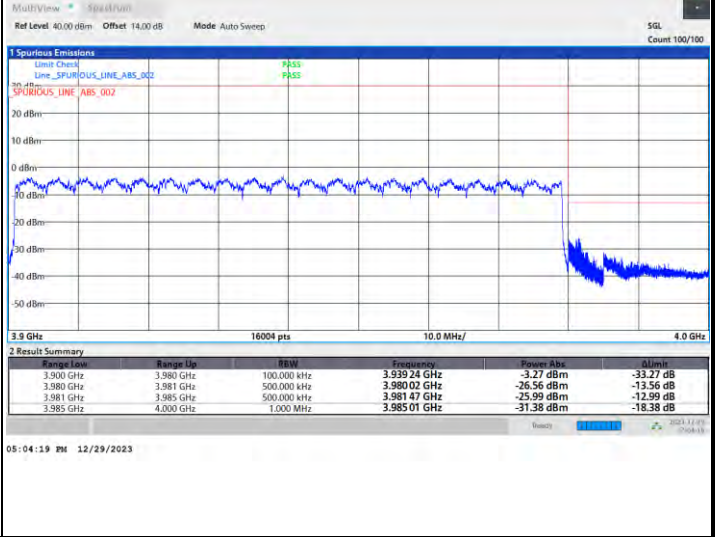
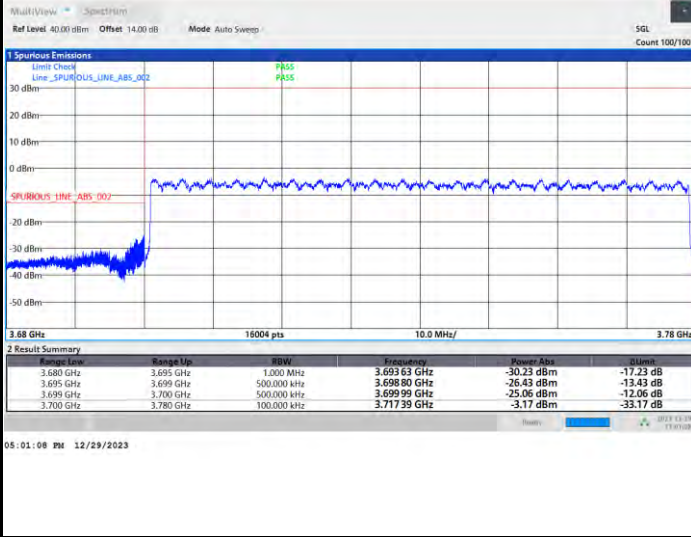




FR1 n77 / 80MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

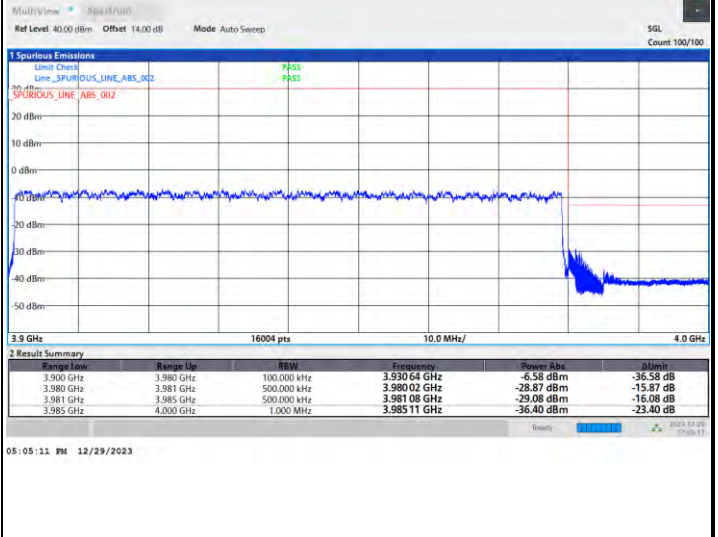
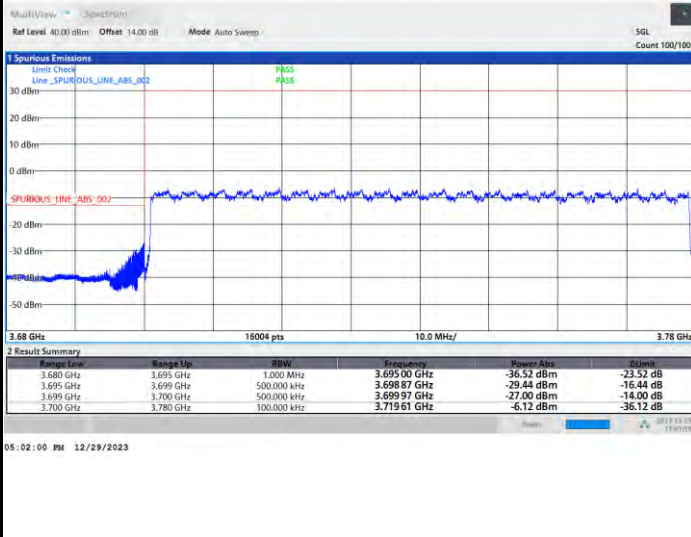
Highest Band Edge / Full RB



FR1 n77 / 80MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

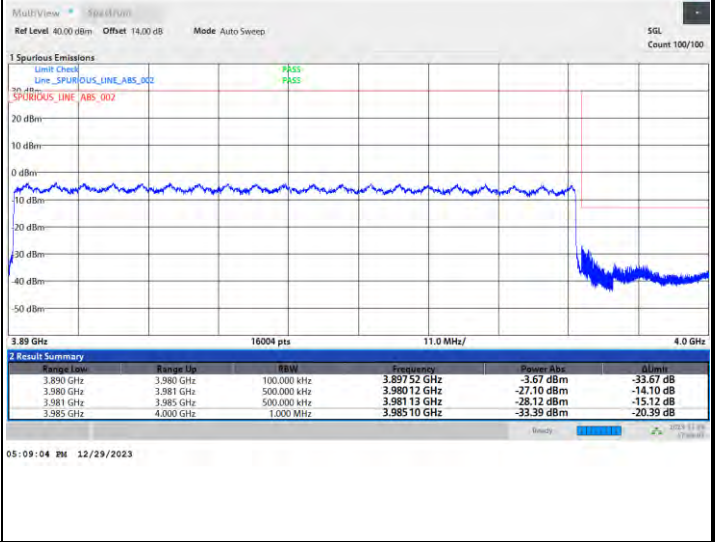
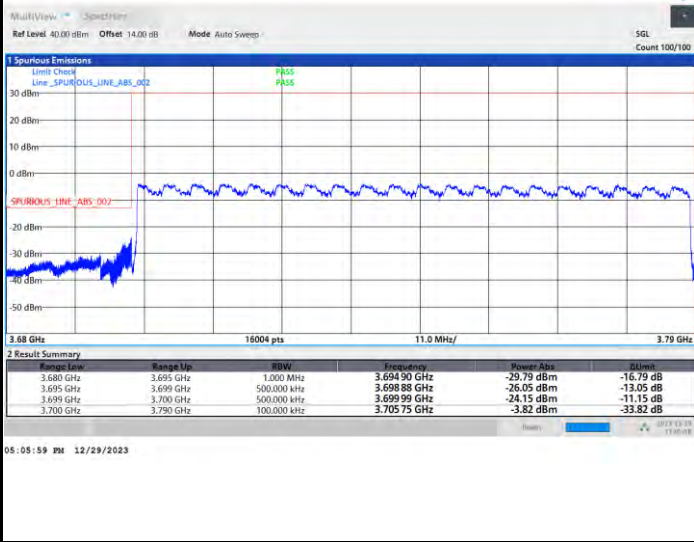




FR1 n77 / 90MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

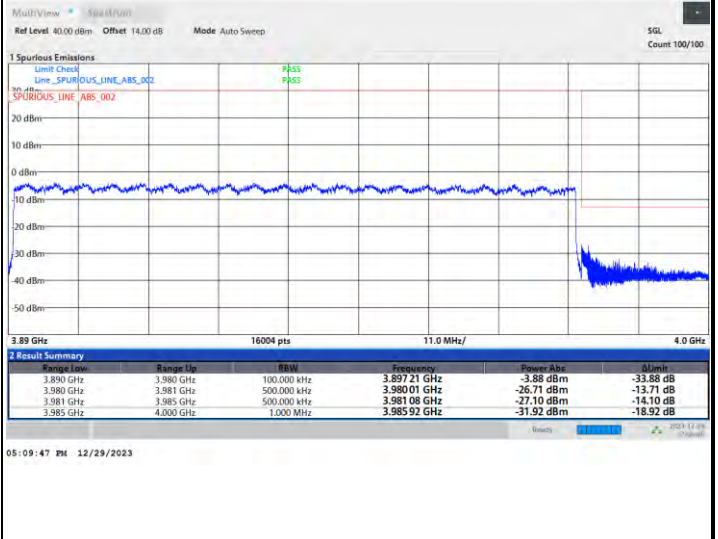
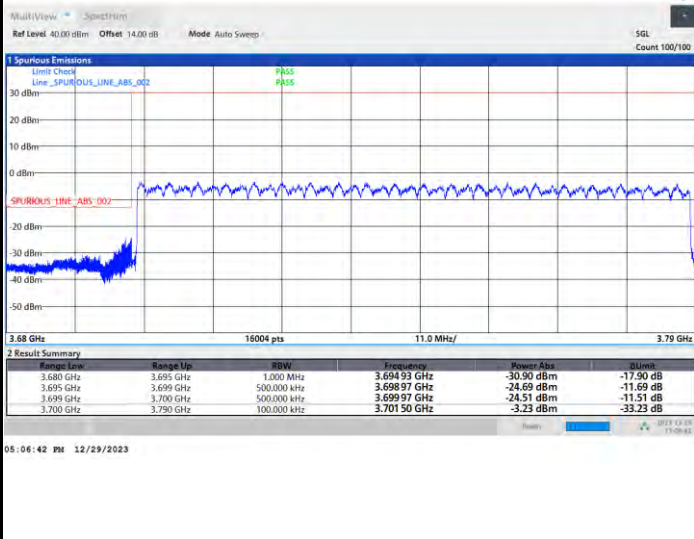
Highest Band Edge / Full RB



FR1 n77 / 90MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

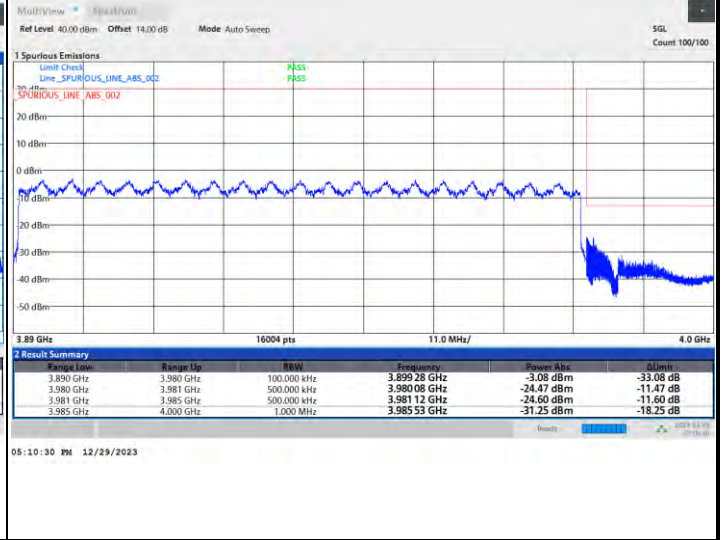
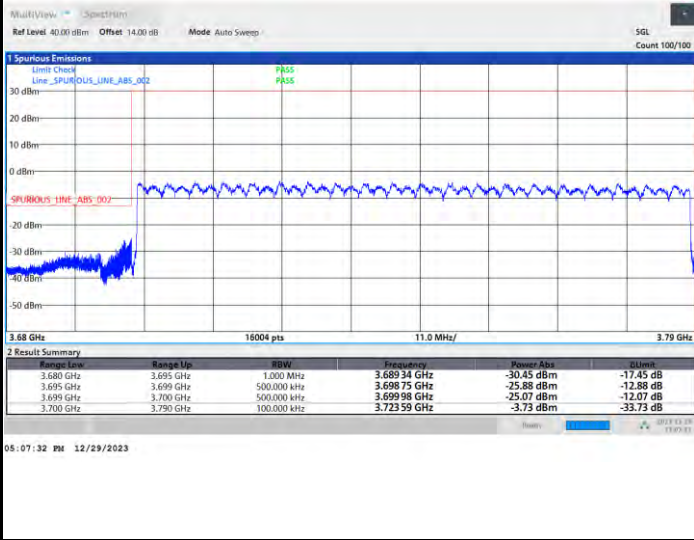




FR1 n77 / 90MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

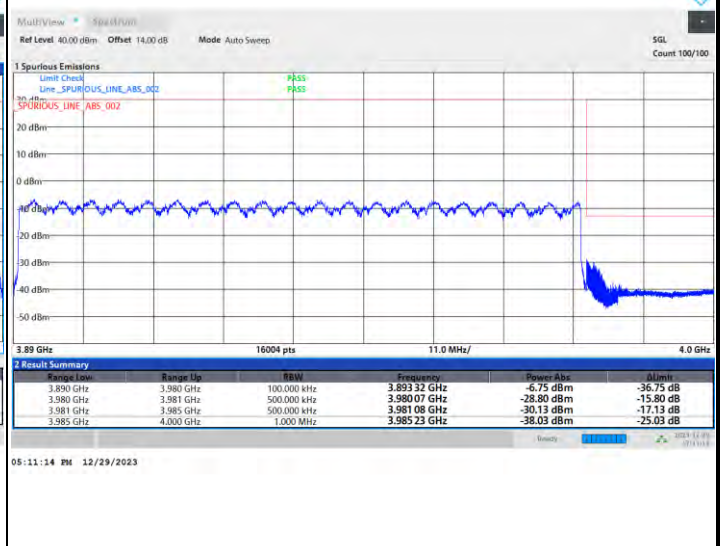
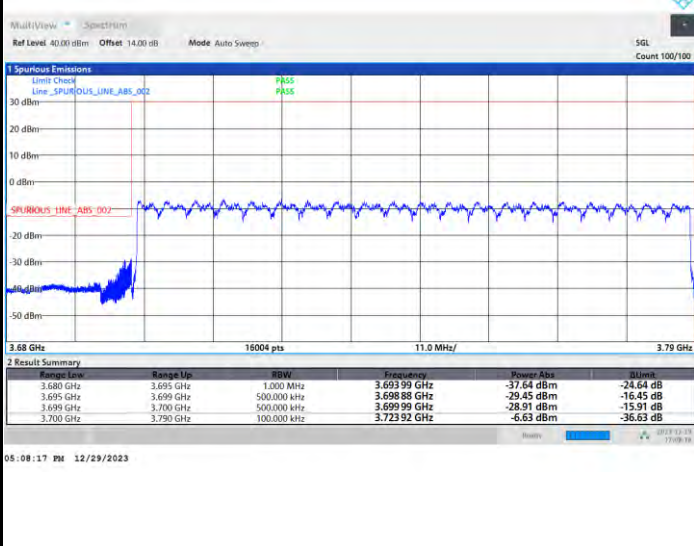
Highest Band Edge / Full RB



FR1 n77 / 90MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

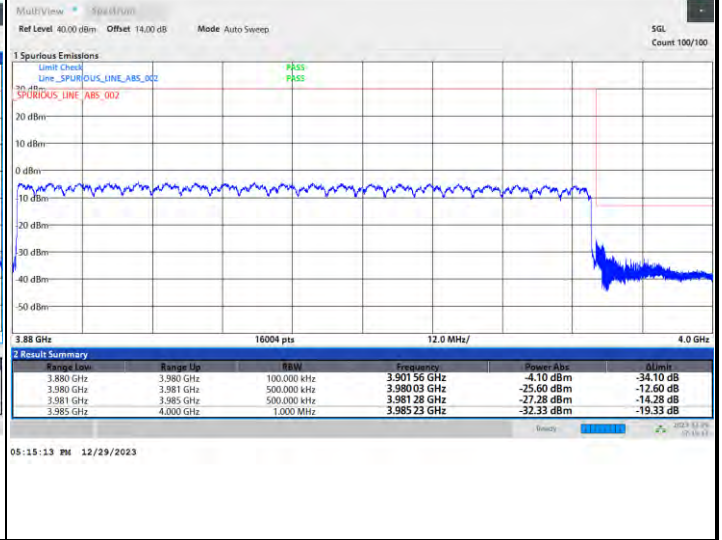
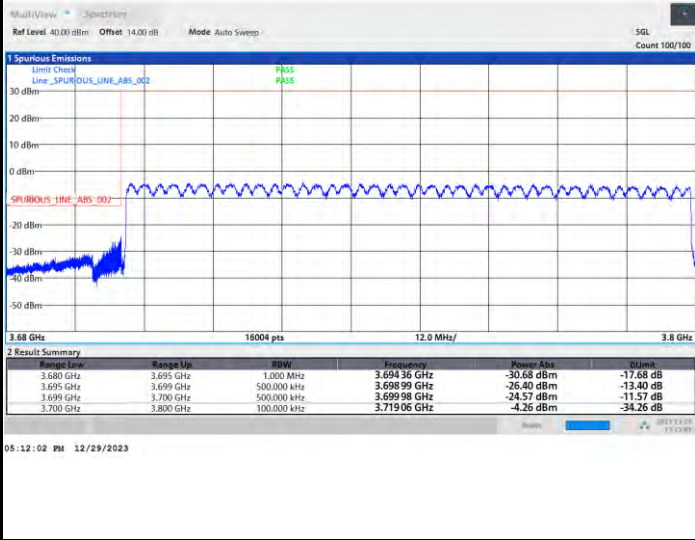




FR1 n77 / 100MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

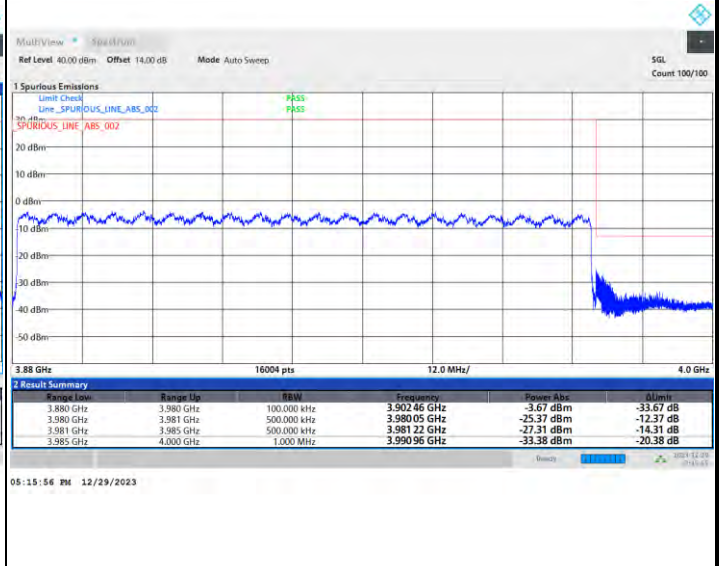
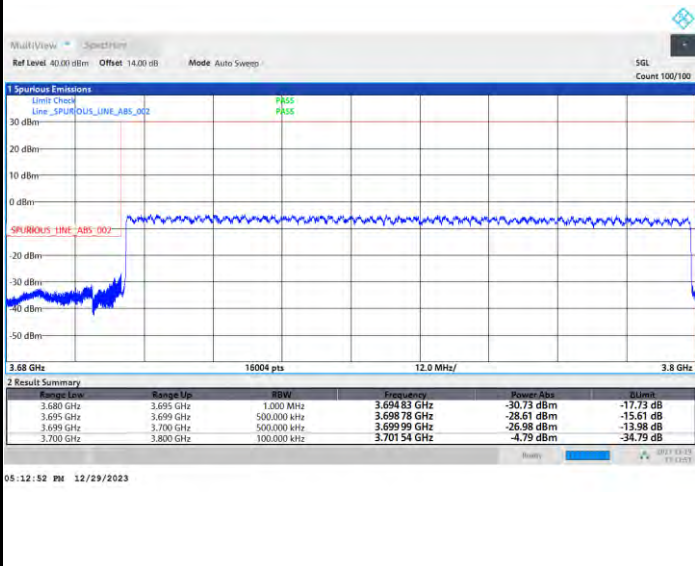
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

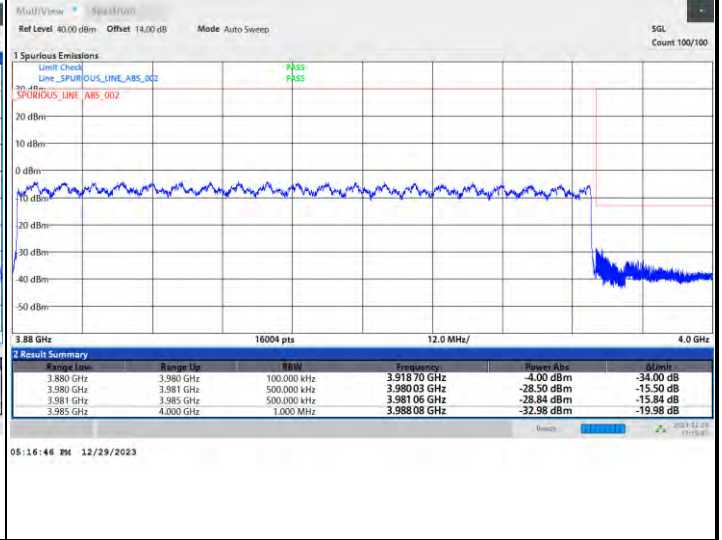
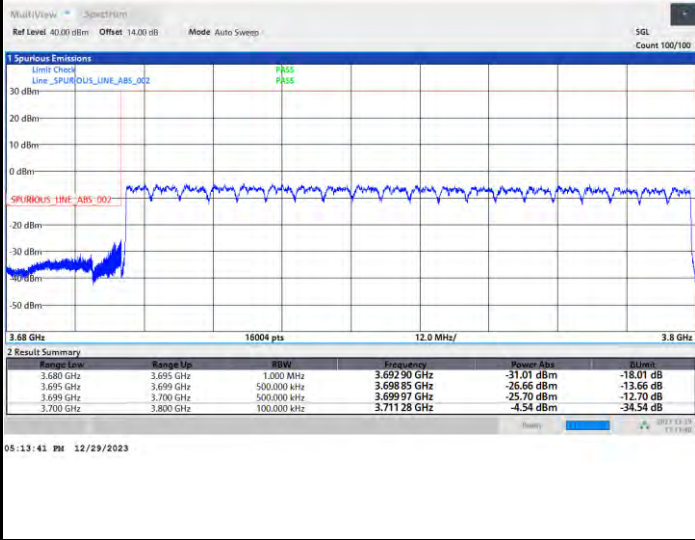




FR1 n77 / 100MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

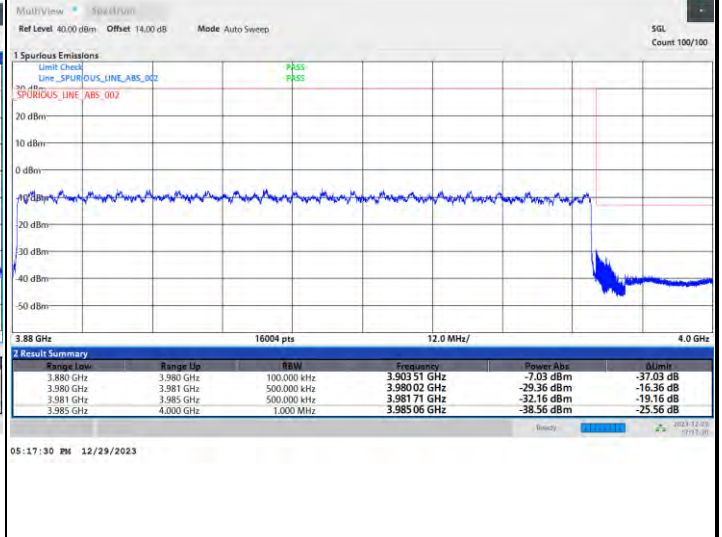
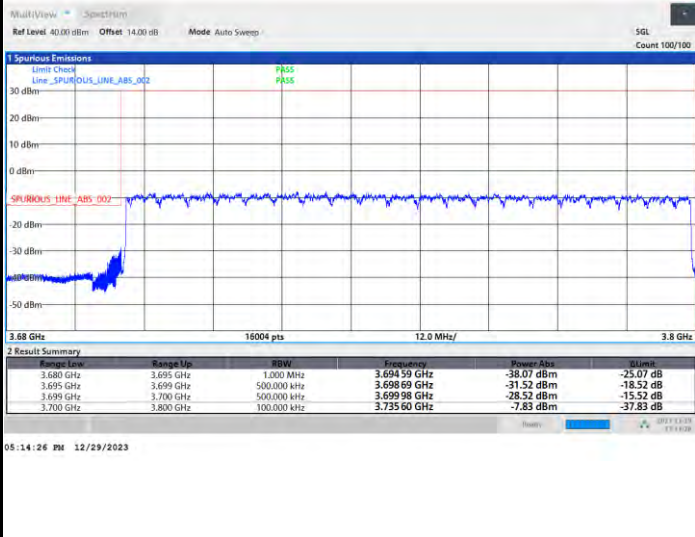
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB





Conducted Spurious Emission

FR1 n77 / 10MHz / CP OFDM / QPSK / 1RB1

Lowest Channel



Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0047	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0019	

Note:

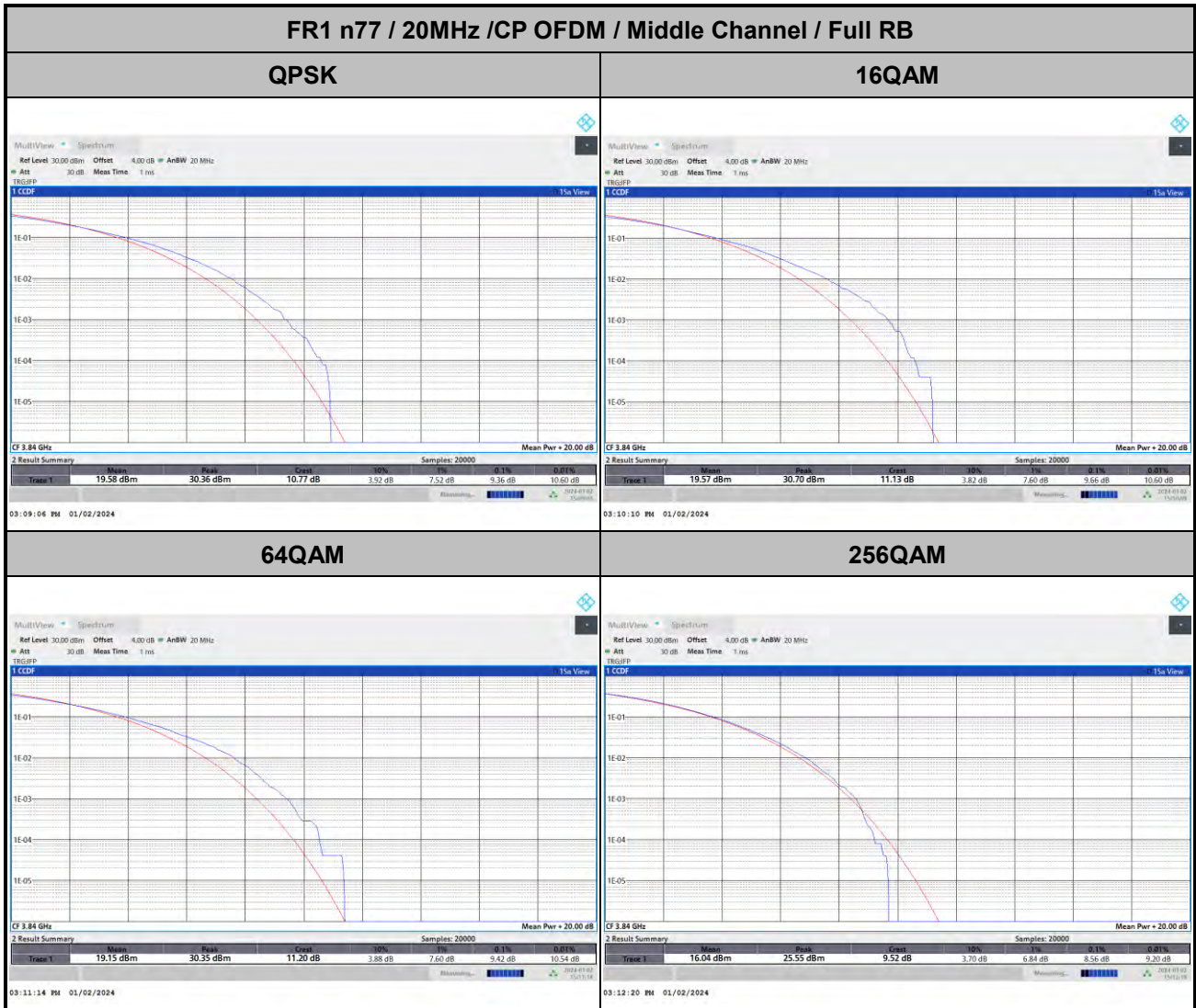
- 1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



MIMO <Ant. 6+1> (1)

Peak-to-Average Ratio

Mode	FR1 n77 / 20MHz / CP OFDM				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	9.36	9.66	9.42	8.56	PASS





26dB Bandwidth

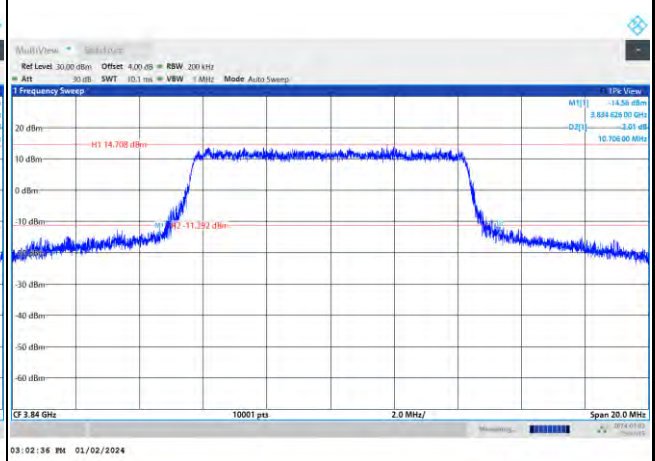
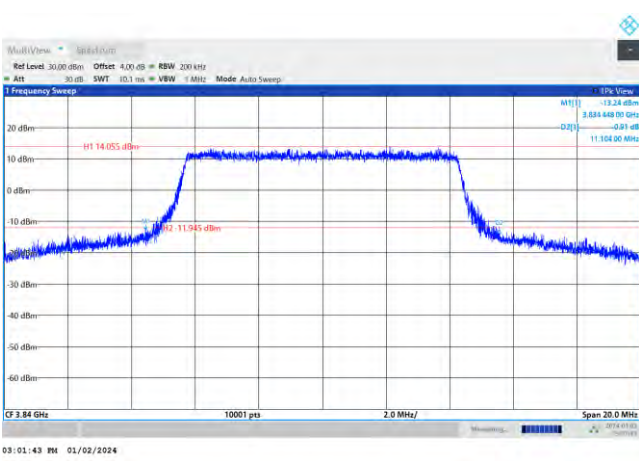
Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	11.10	10.71	16.18	15.65	22.01	21.20	25.84	25.64
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	10.92	10.35	15.88	15.50	22.36	20.46	26.84	25.59
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	32.15	31.03	42.98	49.08	54.45	52.60	67.02	77.85
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	31.12	30.62	42.66	42.28	60.91	51.41	77.59	66.24
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	86.25	81.24	86.26	84.62	97.69	97.67	106.88	107.10
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	76.89	76.41	85.82	84.03	107.19	96.60	106.86	106.24



FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

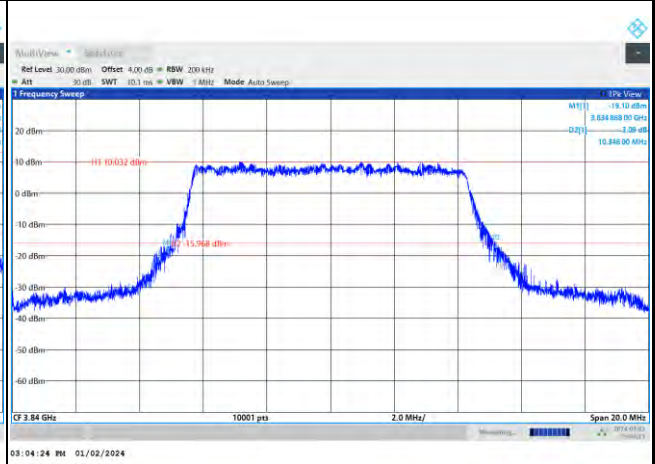
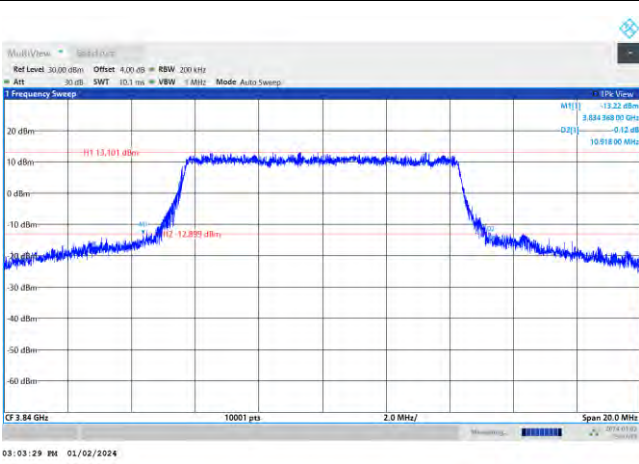
QPSK

16QAM



64QAM

256QAM

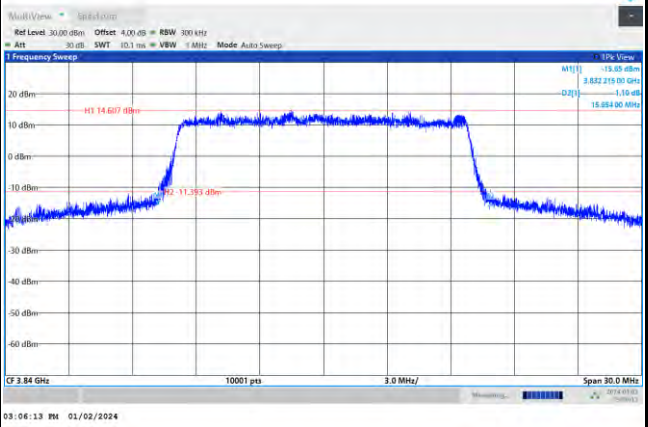
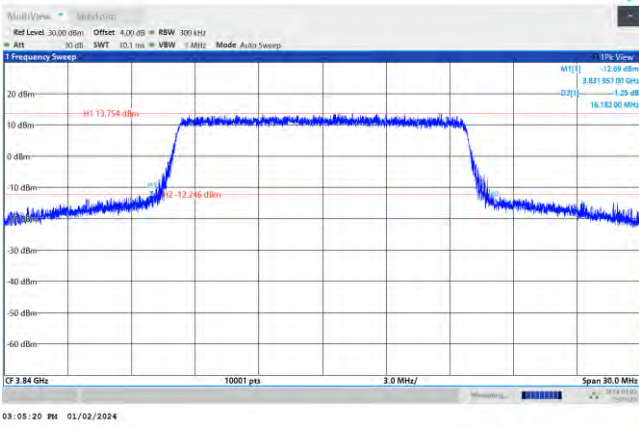




FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

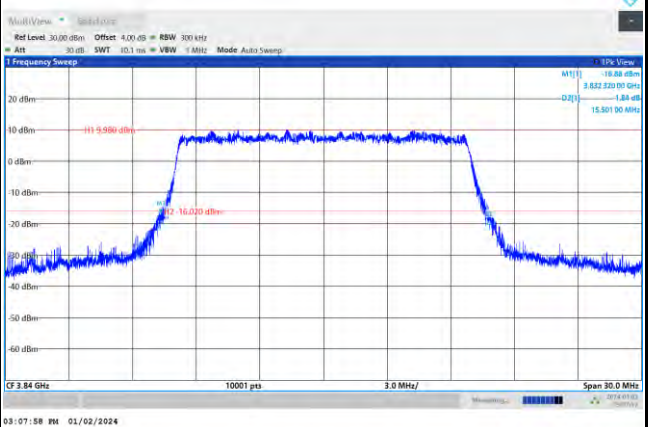
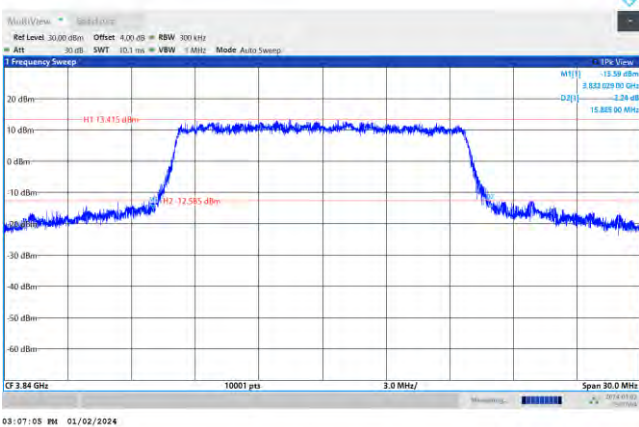
QPSK

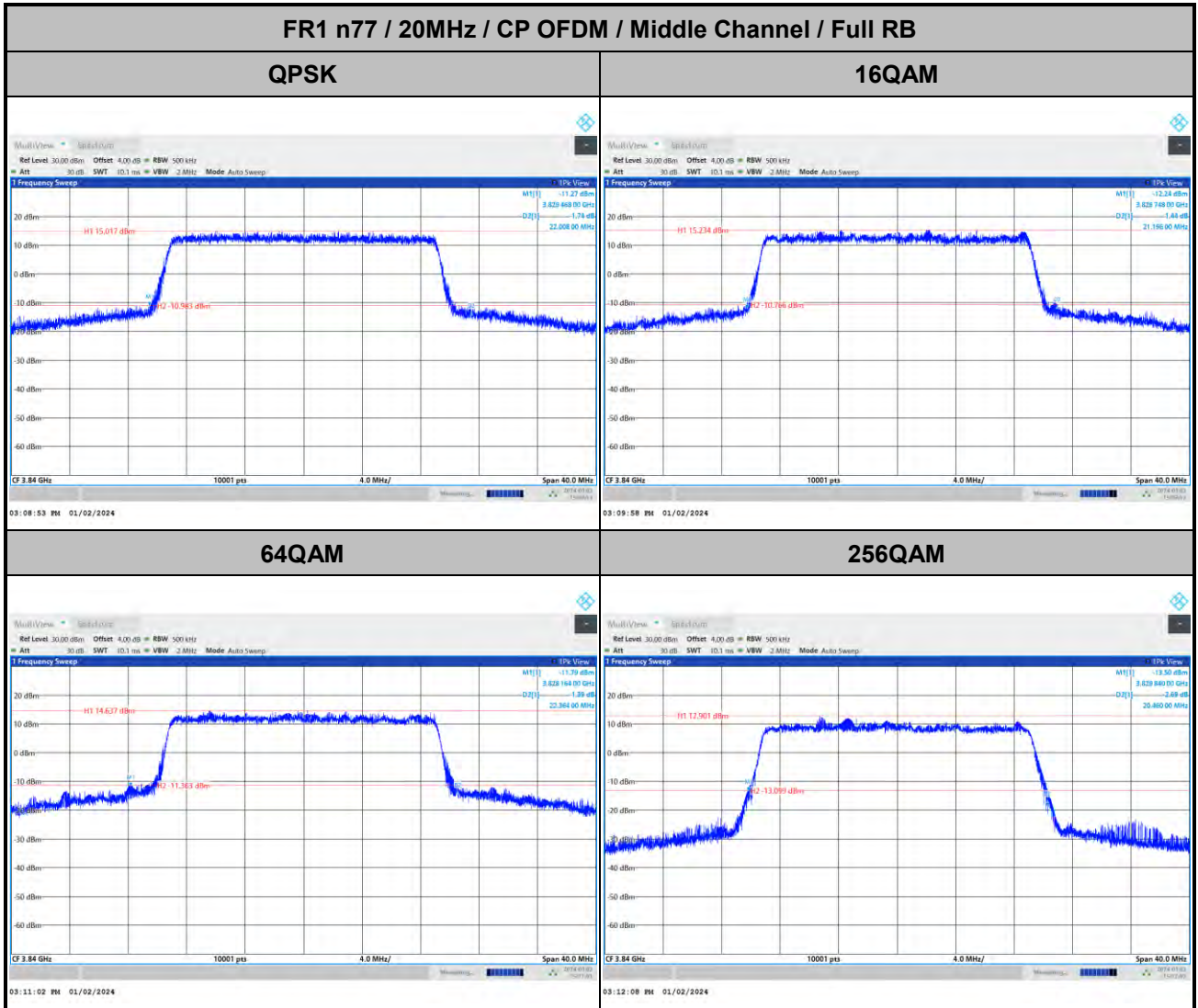
16QAM

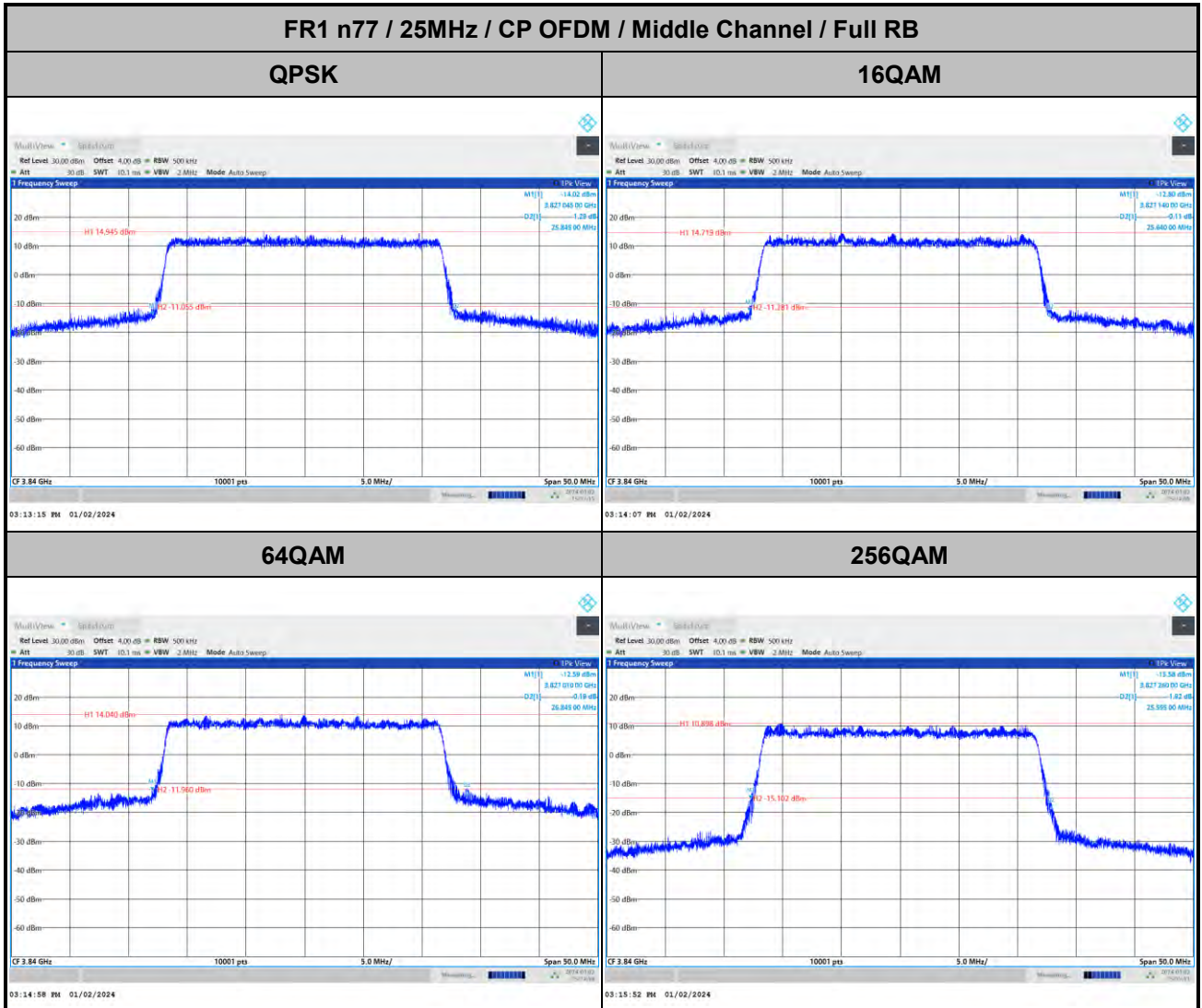


64QAM

256QAM





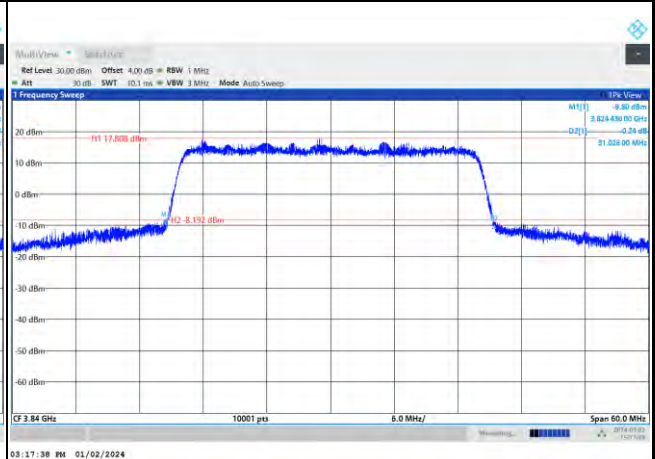
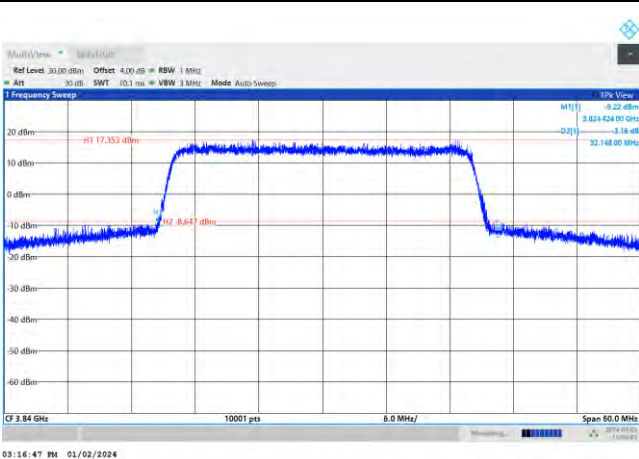




FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

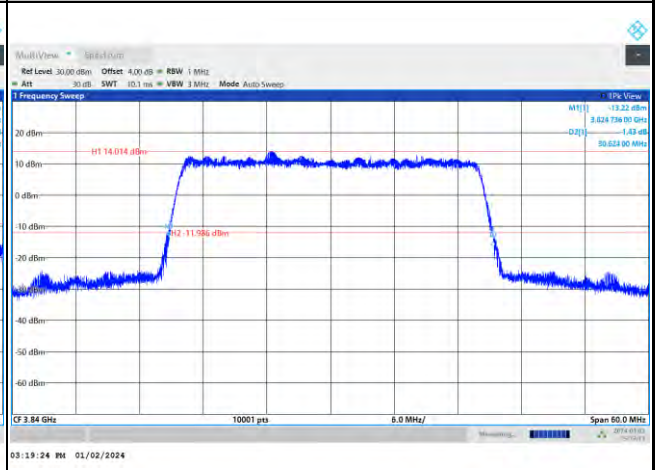
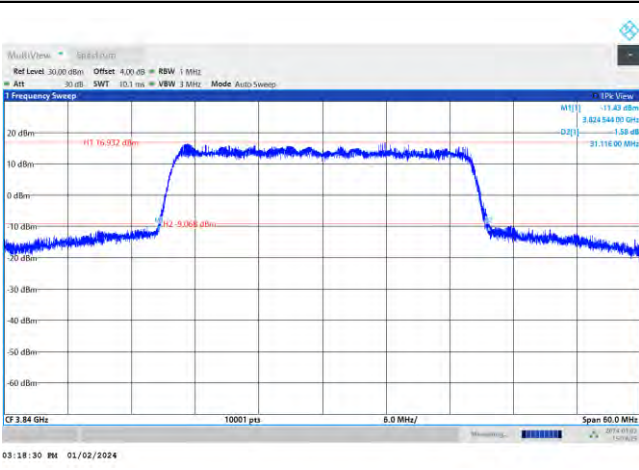
QPSK

16QAM



64QAM

256QAM

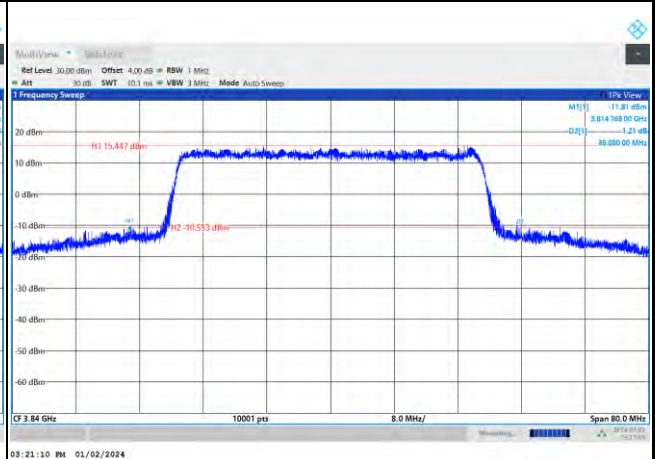
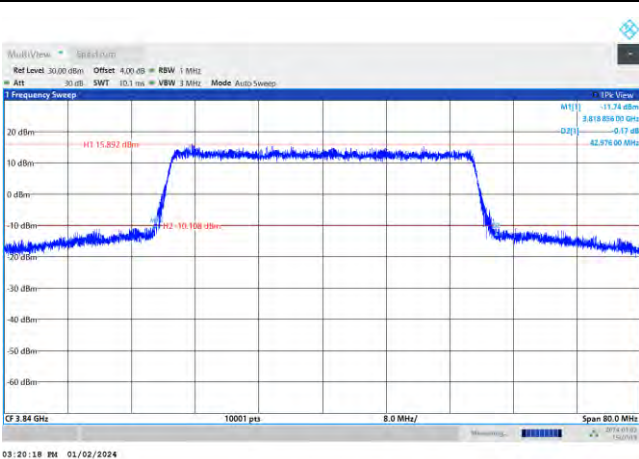




FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

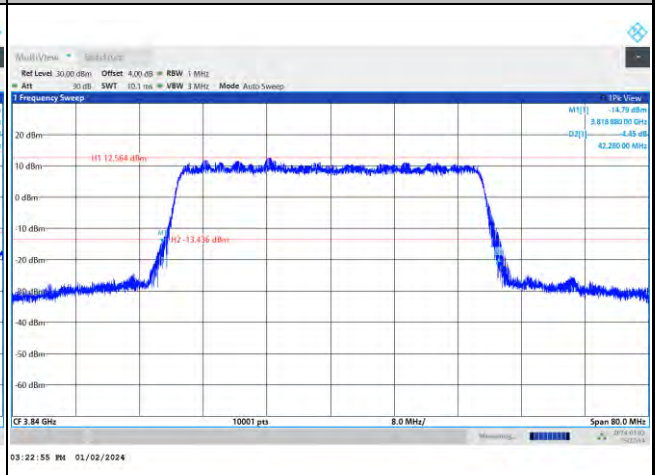
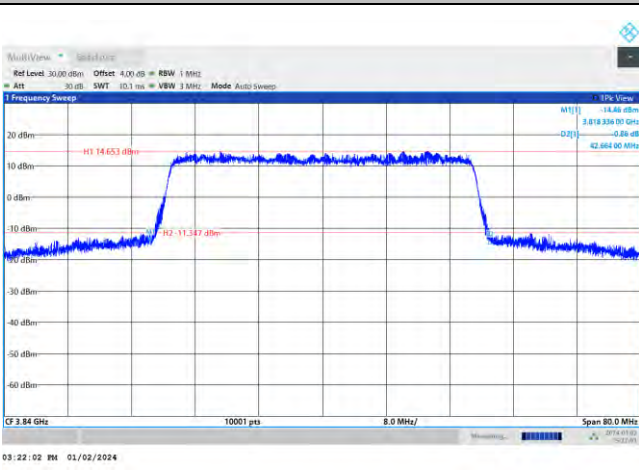
QPSK

16QAM



64QAM

256QAM

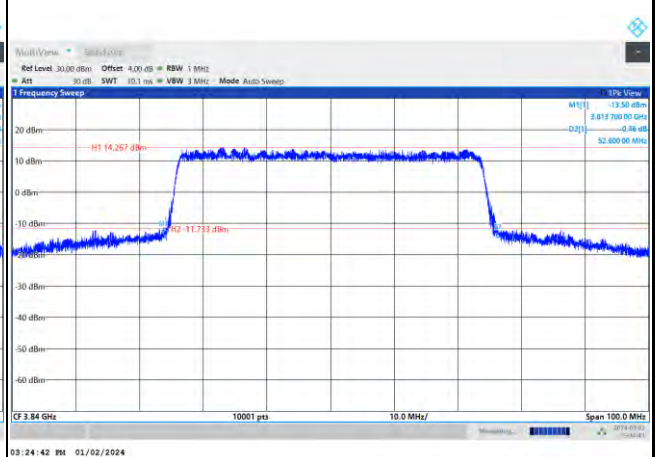
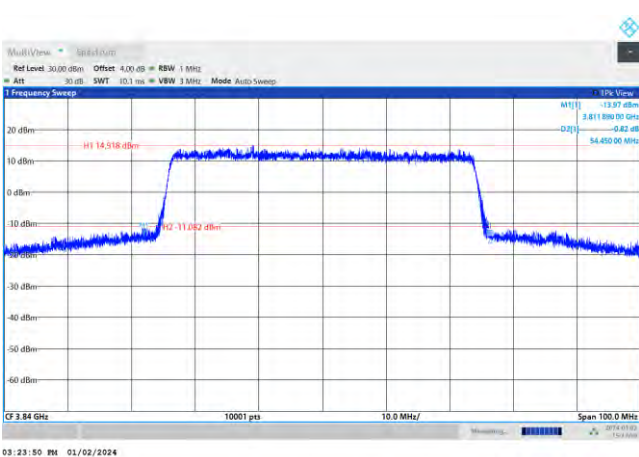




FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

QPSK

16QAM



64QAM

256QAM

